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Manufacturing Investment Statistics

Capital Appropriations

Second Quarter 1980

and

Capital Investment and Supply Conditions

July 1980

THE CONFERENCE BOARD, INC.
845 Third Avenue
New York, N.Y. 10022

STATISTICAL REFERENCE INDEX
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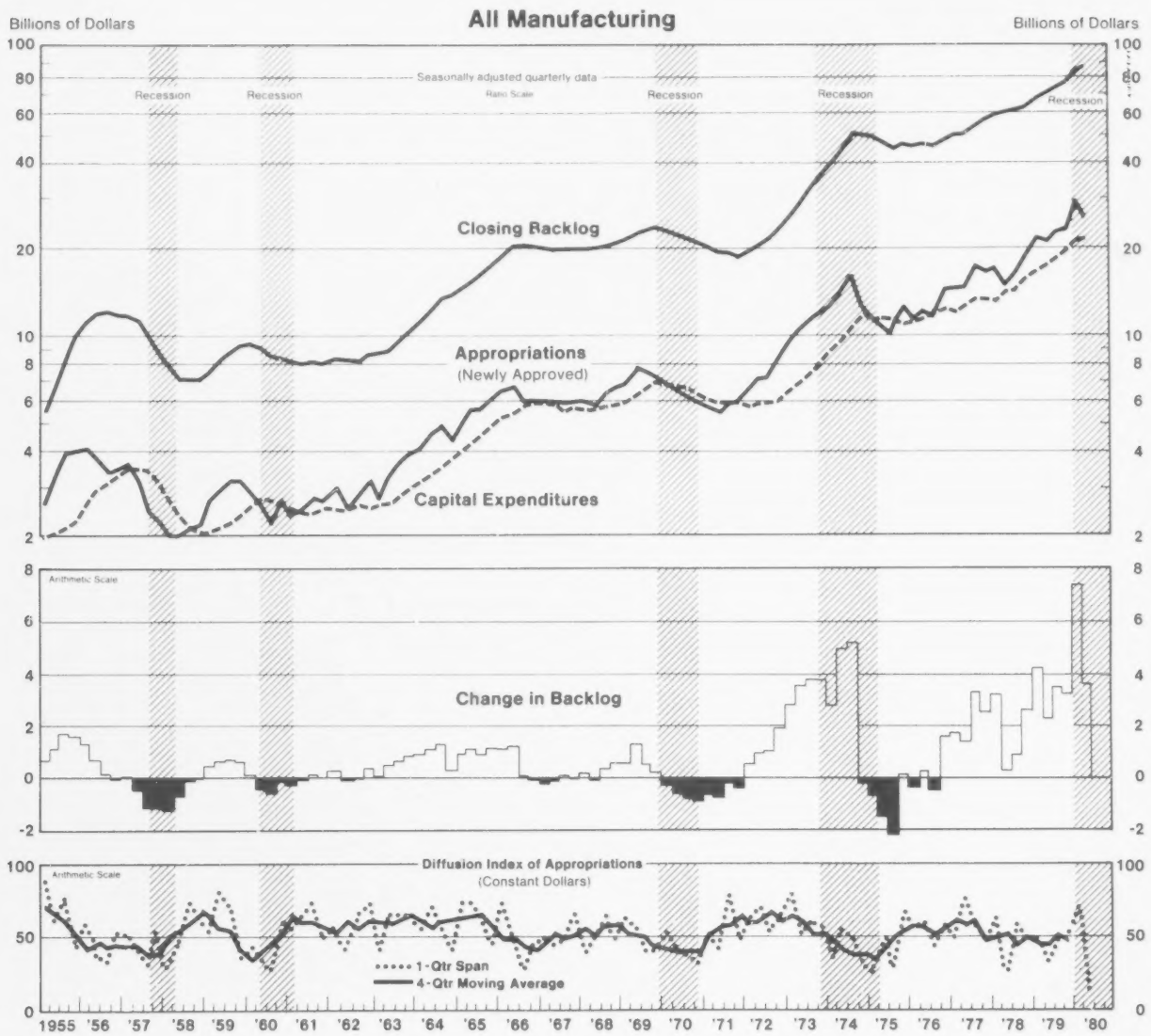
THE CONFERENCE BOARD

CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION



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The Conference Board

Quarterly Survey of Capital Appropriations

Second Quarter 1980

Capital appropriations of the nation's 1,000 largest manufacturers dropped 12.7% in the second quarter of 1980, following a very large increase in the first quarter (26.7%). The 1,000 companies' capital spending was about unchanged in the second quarter (up 0.6%), following a relatively large rise in the first quarter (8.4%). Although appropriations fell, they were still well above the spending pace in the quarter, and there was consequently a rise in the backlog of appropriated but unspent funds.

The second-quarter weakness of appropriations and spending was almost certainly due in part to caution in the face of recession. But to some extent, the weakness was probably just an offsetting reaction to the first-quarter surge. A suggestion that the recession's impact has not yet been especially great is offered by the fact that the responding companies' expectations for full-year 1980 appropriations and spending strengthened between spring and summer. *The midyear expectations suggest that appropriations will drop a bit further in the second half, although the 1980 total will be well above 1979 due to the big rise in this year's first quarter.* Spending will rise a bit in the second half if the full-year expectation is realized, and the unspent backlog will also rise—which is unusual in a recession. Durable goods industries, as usual, are hit harder by the recession than nondurables, and the 1980 strength in capital appropriations and spending is in the nondurables sector.

Developments in the Second Quarter

Total appropriations dropped 12.7% in the second quarter to $25.8 billion (seasonally adjusted). Appropriations rose 29% in the petroleum industry, fell 12.5% in the rest of nondurables, and fell 33.3% in the durable goods sector. Appropriations dropped in every durables industry except instruments (up slightly) and the declines were generally large. They exceeded 30% in steel, nonelectrical machinery, motor vehicles, other transportation equipment, stone-clay-glass, and the miscellaneous durables industries. However, the largest durable goods industry, electrical equipment, posted only a small drop in appropriations and this mitigated the overall decline. Nonetheless, total durables appropriations in the second quarter were only $9.6 billion, the lowest since 1978-III.

Petroleum appropriations are volatile but the 29% rise in the second quarter was unusually large and came on the heels of an even bigger rise in the first quarter. The food industry also showed a very big increase (32.5%) in the second quarter, but this followed a sizable first-quarter drop. In the other nondurables industries, appropriations declined in the second quarter; the drop exceeded 30% in textiles, paper, and miscellaneous nondurables.

The big appropriations rise in the first quarter had been a surprise, since the economy was moving into recession and interest rates were escalating toward the quarter's end. There is generally a spurt in capital investment activity as the economy reaches a business cycle peak, but the first-quarter appropriations increase seemed larger than could be accounted for by this factor. The

second-quarter appropriations decline did not entirely offset the previous rise. That is, appropriations in the second quarter were higher than in the fourth quarter. However, this outcome was a result of the big second-quarter rise in appropriations of the giant petroleum industry. Excluding petroleum, second-quarter appropriations were more than $1 billion below the fourth quarter.

Cancellations and adjustments of appropriations totaled $711 million in the second quarter, a normal amount. Net appropriations were thus $25.0 billion, down 12.8% from the first quarter. Capital spending by the 1,000 companies totaled $21.4 billion in the second quarter, up only 0.6% from the first. Outlays fell in most durables industries but in nondurables declines were in the minority and were relatively small. With spending continuing to run below net new appropriations, the backlog of unspent funds grew by $3.6 billion.

Revision of Data

The regular annual recalculation of seasonal adjustment factors has resulted in revision of the seasonally adjusted data for 1979. The revised seasonal factors contributed to the downward revision of first-quarter 1980 appropriations but the inclusion of data from companies late in reporting for the quarter was also important. The revised estimate of first-quarter appropriations is 3.2% below the preliminary estimate published three months ago. First-quarter spending has been revised down 2.2%.

Prospects for 1980

In 1979, appropriations rose 32% and spending 25%. As of January 1980, expectations were for appropriations to drop 8% this year and spending to rise 13%. *Expectations were revised up after the first quarter and again after the second, and now point to full-year gains of 17% in appropriations and 21% in spending (table 4).* The upward revisions have generally been in petroleum and other nondurables industries, not durables. Although the 1980 expectations show a sharp slowdown of appropriations growth from the 1979 pace, as would be expected in a recession, the indicated 17% rise is nevertheless large by historical standards. Of course, inflation is a more potent force boosting appropriations now than it was historically. Capital spending is also boosted by inflation, but in addition it is a "lagging" series that continues to rise after the economy has begun to contract. Thus the expected 21% rise in spending this year is rather less surprising than the 17% expected in appropriations.

The durable goods industries, always more vulnerable to recession than soft goods, expect their aggregate appropriations to drop 7% in 1980 (compared with a 31% rise in 1979) and their spending to rise only 12% (compared with 33% in 1979). But the nondurables industries expect faster growth this year than last in both appropriations (39% vs. 33%) and spending (30% vs. 19%). Five industries expect faster 1980 growth of both appropriations and spending: food, chemicals, petroleum, miscellaneous nondurables, and nonferrous metals. Eight expect slower 1980 growth in both categories: paper, steel, nonelectrical machinery, motor vehicles, stone-clay-glass, fabricated metals, instruments, and miscellaneous durables.

Of course, it remains to be seen whether the expectations are fulfilled. With respect to spending, this would require exceptionally large gains in the second half of 1980 in a number of industries.

Lora S. Collins

TABLE 1. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES
Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	III-79 to IV-79	IV-79 to I-80	I-80 to II-80	II-79 to II-80	III-79 to IV-79	IV-79 to I-80	I-80 to II-80	II-79 to II-80
				—APPROPRIATIONS—				
ALL MANUFACTURING	2.6	26.7	—12.7	21.5	2.0	23.6	—13.3	14.5
ALL MFG. EX PETROLEUM	5.1	24.6	—25.9	— 0.5	4.5	21.0	—26.9	— 6.8
DURABLE GOODS	9.4	25.7	—33.3	— 9.4	9.2	21.7	—34.5	—15.4
Primary iron & steel	11.4	6.1	—56.6	—53.4	10.2	5.2	—57.8	—56.9
Primary nonferrous metals	—26.5	215.2	—10.2	90.0	—27.4	207.7	—11.8	75.6
Electrical machinery & equipment	23.4	8.0	— 3.6	23.4	23.3	4.5	— 4.6	15.0
Nonelectrical machinery	—22.0	70.0	—37.3	—27.5	—21.0	64.2	—39.7	—32.2
Motor vehicles & equipment	81.8	—20.9	—41.7	—19.9	84.0	—24.8	—41.6	—25.1
Other transportation equipment	— 4.7	65.6	—57.0	—31.0	— 7.9	65.6	—59.2	—35.8
Stone, clay & glass	8.5	49.9	—56.6	—37.8	7.4	48.1	—57.5	—41.4
Fabricated metals	35.9	—35.6	—13.6	—37.1	33.8	—36.8	—15.0	—41.5
Instruments & photo equipment	9.9	—18.0	3.2	0.3	8.7	—18.1	— 0.2	— 8.3
Other durable goods†	—25.6	78.6	—34.1	99.8	—26.0	66.2	—32.3	99.2
NONDURABLE GOODS	— 3.2	27.7	7.0	52.6	— 4.4	25.5	7.4	45.1
Food & beverages	22.6	—18.4	32.5	60.5	20.8	—18.7	30.5	51.6
Textiles	65.5	—27.0	—37.8	—48.5	66.8	—28.3	—40.3	—52.5
Paper & allied products	—33.1	147.7	—61.2	—49.8	—33.5	141.9	—62.2	—53.4
Chemicals & allied products	— 7.5	12.8	— 0.6	23.2	— 8.1	11.0	— 2.7	16.3
Petroleum & coal products	— 5.0	34.2	29.0	103.1	— 6.2	32.9	31.1	96.7
Rubber products	—42.4	51.3	—11.5	—15.1	—42.0	47.5	—12.0	—19.7
Other nondurable goods†	12.0	78.8	—33.7	81.3	7.2	64.7	—27.3	71.1
				—EXPENDITURES—				
ALL MANUFACTURING	5.0	8.4	0.6	22.0	4.3	6.0	— 0.4	15.2
ALL MFG. EX PETROLEUM	4.1	7.5	0.9	21.8	3.6	4.7	— 0.9	14.2
DURABLE GOODS	6.0	6.9	— 1.0	22.2	5.8	3.9	— 3.2	14.2
Primary iron & steel	23.4	2.8	— 8.9	38.3	22.1	1.9	—11.4	28.2
Primary nonferrous metals	14.4	1.7	20.5	45.8	13.0	— 0.8	18.4	35.3
Electrical machinery & equipment	5.6	4.4	9.8	35.6	5.6	1.0	8.6	26.5
Nonelectrical machinery	4.4	0.5	4.2	19.1	5.7	— 2.9	0.3	11.2
Motor vehicles & equipment	— 0.2	2.4	—11.1	7.2	1.0	— 2.6	—11.0	0.3
Other transportation equipment	8.9	31.5	— 4.9	54.7	5.2	31.5	— 9.8	44.1
Stone, clay & glass	11.7	— 1.1	— 3.9	0.7	10.6	— 2.3	— 5.8	— 5.4
Fabricated metals	1.2	11.8	— 9.0	— 0.2	— 0.4	9.8	—10.5	— 7.1
Instruments & photo equipment	5.0	12.9	— 4.0	10.5	3.9	12.7	— 7.3	1.1
Other durable goods†	— 6.0	26.6	— 5.3	16.9	— 6.5	17.8	— 2.7	16.5
NONDURABLE GOODS	4.1	9.8	2.1	21.8	2.8	8.1	2.2	16.1
Food & beverages	— 4.6	17.5	3.5	28.7	— 6.0	17.1	2.0	21.5
Textiles	—15.9	18.3	15.0	25.6	—15.3	16.2	10.3	16.2
Paper & allied products	— 0.1	12.1	— 2.0	19.4	— 0.8	9.5	— 4.6	10.8
Chemicals & allied products	7.8	3.4	1.9	17.2	7.2	1.7	— 0.3	10.6
Petroleum & coal products	8.3	11.4	— 0.4	22.5	6.9	10.3	1.2	18.6
Rubber products	—11.6	1.4	— 2.7	—11.0	—11.0	— 1.2	— 3.1	—15.9
Other nondurable goods†	— 1.8	5.0	27.2	39.5	— 6.0	— 3.2	39.4	31.5

See General Notes on page 7.

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Quarterly Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	III-79	IV-79	I-80	II-80	III-79	IV-79	I-80	II-80
ALL MANUFACTURING								
Opening backlog	69,950	73,446	76,662	84,086	70,816	72,847	74,718	78,893
Newly approved	22,688	23,279	29,503	25,761	13,256	13,519	16,710	14,480
Canceled	485	416	783	711	280	235	440	399
Capital expenditure	18,707	19,647	21,296	21,426	10,945	11,414	12,095	12,047
Closing backlog	73,446	76,662	84,086	87,710	72,847	74,718	78,893	80,927
DURABLE GOODS								
Opening backlog	35,841	37,162	39,000	42,524	35,697	36,477	37,565	39,574
Newly approved	10,488	11,470	14,420	9,625	6,214	6,786	8,262	5,409
Canceled	68	—15	580	275	40	—9	326	152
Capital expenditure	9,099	9,647	10,316	10,213	5,394	5,707	5,927	5,740
Closing backlog	37,162	39,000	42,524	41,661	36,477	37,565	39,574	39,090
Primary iron & steel								
Opening backlog	4,389	4,409	4,452	4,378	5,690	5,702	5,727	5,684
Newly approved	824	918	974	423	493	544	572	241
Canceled	—9	—128	17	4	—5	—76	10	2
Capital expenditure	813	1,003	1,031	939	487	594	605	536
Closing backlog	4,409	4,452	4,378	3,858	5,702	5,727	5,684	5,387
Primary nonferrous metals								
Opening backlog	2,938	3,059	2,934	3,629	3,298	3,369	3,296	3,692
Newly approved	528	388	1,223	1,098	311	226	695	613
Canceled	—9	37	44	153	—5	22	25	85
Capital expenditure	416	476	484	583	245	277	275	326
Closing backlog	3,059	2,934	3,629	3,991	3,369	3,296	3,692	3,894
Electrical machinery & equipment								
Opening backlog	3,259	3,308	3,641	4,026	3,719	3,748	3,945	4,165
Newly approved	1,368	1,688	1,823	1,758	809	998	1,042	994
Canceled	44	8	32	6	26	5	18	3
Capital expenditure	1,275	1,347	1,406	1,544	754	796	804	873
Closing backlog	3,308	3,641	4,026	4,234	3,748	3,945	4,165	4,282
Nonelectrical machinery								
Opening backlog	7,100	7,394	6,979	7,802	6,223	6,397	6,148	6,625
Newly approved	2,514	1,962	3,335	2,091	1,490	1,177	1,932	1,166
Canceled	—25	33	157	29	—15	20	91	16
Capital expenditure	2,245	2,344	2,355	2,454	1,330	1,406	1,364	1,368
Closing backlog	7,394	6,979	7,802	7,410	6,397	6,148	6,625	6,406
Motor vehicles & equipment								
Opening backlog	8,463	8,610	10,113	10,979	7,172	7,259	8,157	8,649
Newly approved	1,606	2,920	2,309	1,347	948	1,745	1,313	766
Canceled	27	—12	—20	10	16	—7	—11	6
Capital expenditure	1,432	1,429	1,463	1,301	846	854	832	740
Closing backlog	8,610	10,113	10,979	11,015	7,259	8,157	8,649	8,669
Other transportation equipment								
Opening backlog	2,684	2,937	3,062	3,503	2,340	2,489	2,561	2,813
Newly approved	987	941	1,558	670	584	538	891	363
Canceled	—10	6	52	71	—6	3	30	38
Capital expenditure	744	810	1,065	1,013	440	463	609	549
Closing backlog	2,937	3,062	3,503	3,089	2,489	2,561	2,813	2,588
Stone, clay & glass								
Opening backlog	2,499	2,431	2,347	2,557	2,495	2,454	2,404	2,528
Newly approved	519	563	844	366	312	335	496	211
Canceled	14	7	1	8	8	4	1	5
Capital expenditure	573	640	633	608	345	381	372	350
Closing backlog	2,431	2,347	2,557	2,307	2,454	2,404	2,528	2,384
Fabricated metals								
Opening backlog	1,576	1,518	1,607	1,489	1,610	1,575	1,627	1,559
Newly approved	370	503	324	280	221	296	187	159
Canceled	27	8	—12	—50	16	5	—7	—28
Capital expenditure	401	406	454	413	240	239	263	235
Closing backlog	1,518	1,607	1,489	1,406	1,575	1,627	1,559	1,512

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	III-79	IV-79	I-80	II-80	III-79	IV-79	I-80	II-80
Instruments & photo equipment								
Opening backlog	1,130	1,281	1,468	1,434	1,200	1,289	1,398	1,378
Newly approved	758	833	683	705	446	485	397	396
Canceled	22	32	24	47	13	19	14	26
Capital expenditure	585	614	693	665	344	358	403	374
Closing backlog	1,281	1,468	1,434	1,427	1,289	1,398	1,378	1,374
Other durable goods†								
Opening backlog	1,803	2,215	2,397	2,727	1,952	2,195	2,302	2,483
Newly approved	1,014	754	1,347	887	599	443	736	498
Canceled	—13	—6	285	—3	—8	—4	156	—2
Capital expenditure	615	578	732	693	363	340	400	389
Closing backlog	2,215	2,397	2,727	2,924	2,195	2,302	2,483	2,593
NONDURABLE GOODS								
Opening backlog	34,109	36,284	37,662	41,562	35,118	36,370	37,153	39,319
Newly approved	12,200	11,809	15,083	16,136	7,043	6,733	8,448	9,071
Canceled	417	431	203	436	239	244	114	247
Capital expenditure	9,608	10,000	10,980	11,213	5,551	5,707	6,168	6,307
Closing backlog	36,284	37,662	41,562	46,049	36,370	37,153	39,319	41,837
Food & beverages								
Opening backlog	4,258	4,455	5,069	5,025	4,170	4,286	4,640	4,615
Newly approved	1,589	1,948	1,590	2,107	930	1,124	914	1,193
Canceled	49	53	129	328	29	31	74	186
Capital expenditure	1,343	1,281	1,505	1,558	786	739	865	882
Closing backlog	4,455	5,069	5,025	5,246	4,286	4,640	4,615	4,740
Textiles								
Opening backlog	585	573	720	751	706	699	786	804
Newly approved	206	341	249	155	121	201	144	86
Canceled	4	14	5	7	2	8	3	4
Capital expenditure	214	180	213	245	125	106	123	136
Closing backlog	573	720	751	654	699	786	804	750
Paper & allied products								
Opening backlog	4,163	4,331	4,166	4,905	3,939	4,040	3,942	4,371
Newly approved	959	642	1,590	617	575	382	925	349
Canceled	—1	16	—36	61	—1	10	—21	35
Capital expenditure	792	791	887	869	475	471	516	492
Closing backlog	4,331	4,166	4,905	4,592	4,040	3,942	4,371	4,194
Chemicals & allied products								
Opening backlog	7,739	8,267	8,450	8,939	8,358	8,666	8,772	9,052
Newly approved	2,974	2,750	3,103	3,084	1,736	1,596	1,771	1,723
Canceled	108	46	8	55	63	27	5	31
Capital expenditure	2,338	2,521	2,606	2,655	1,364	1,463	1,487	1,483
Closing backlog	8,267	8,450	8,939	9,313	8,666	8,772	9,052	9,260
Petroleum and coal products								
Opening backlog	14,382	15,539	16,009	17,977	15,018	15,671	15,933	17,020
Newly approved	5,551	5,275	7,078	9,133	3,136	2,941	3,908	5,123
Canceled	230	297	88	—5	130	166	49	—3
Capital expenditure	4,164	4,508	5,022	5,003	2,352	2,514	2,773	2,806
Closing backlog	15,539	16,009	17,977	22,112	15,671	15,933	17,020	19,339
Rubber products								
Opening backlog	918	994	944	1,011	1,043	1,088	1,058	1,097
Newly approved	328	189	286	253	195	113	167	147
Canceled	1	17	—6	13	1	10	—3	8
Capital expenditure	251	222	225	219	149	133	131	127
Closing backlog	994	944	1,011	1,032	1,088	1,058	1,097	1,110
Other nondurable goods†								
Opening backlog	2,064	2,125	2,304	2,954	1,884	1,920	2,022	2,361
Newly approved	593	664	1,187	787	351	376	619	450
Canceled	26	—12	15	—23	15	—7	8	—13
Capital expenditure	506	497	522	664	299	281	272	380
Closing backlog	2,125	2,304	2,954	3,100	1,920	2,022	2,361	2,444

See General Notes on page 7.

TABLE 3. PROPORTION OF APPROPRIATIONS FOR PLANT

Percent

	78-II	78-III	78-IV	79-I	79-II	79-III	79-IV	80-I	80-II
ALL MANUFACTURING	24	24	24	21	24	21	21	23	20
DURABLE GOODS	23	25	25	20	24	19	17	19	21
Primary iron and steel	19	12	15	13	9	13	15	8	12
Primary nonferrous metals	35	38	26	25	22	22	24	25	23
Electrical machinery & equipment	22	31	24	18	19	20	16	22	17
Nonelectrical machinery	16	21	23	20	29	19	8	15	24
Motor vehicles & equipment	14	12	13	30	17	21	10	25	14
Other transportation equipment	32	34	17	27	44	20	34	22	38
Stone, clay & glass	12	14	32	14	12	10	12	7	7
Fabricated metals	13	17	12	11	14	13	18	16	14
Instruments & photo equipment	51	37	52	11	10	23	24	13	20
Other durable goods	32	67	77	62	64	21	19	45	20
NONDURABLE GOODS	25	22	22	24	24	23	25	28	18
Food & beverages	19	24	18	25	26	26	29	19	16
Textiles	18	22	16	16	25	26	17	15	26
Paper & allied products	47	12	19	12	15	12	12	13	16
Chemicals & allied products	22	30	29	24	34	28	26	23	23
Rubber products	16	4	15	13	11	18	10	12	4
Other nondurable goods	23	35	17	39	19	20	39	68	11

Based on data from those companies that report appropriations for plant and equipment separately. The composition of this group varies slightly from quarter to quarter. Petroleum industry is excluded. Historical data from 1959 available on request.

See also General Notes on page 7.

TABLE 4. PERCENT CHANGE IN CAPITAL APPROPRIATIONS AND EXPENDITURES: 1979 ACTUAL AND 1980 EXPECTED*

	Appropriations		Expenditures	
	1979	1980	1979	1980
All Manufacturing	32	17	25	21
All Manufacturing except Petroleum	33	10	28	19
Durable goods	31	—7	33	12
Nondurable goods	33	39	19	30
Petroleum	29	41	16	27
Other	36	38	20	32

*Based on survey respondents' own expectations.

See also General Notes on page 7.

TABLE 5. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS
In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1976	1977	1978	1979	1976	1977	1978	1979
				—APPROPRIATIONS—				
ALL MANUFACTURING	50,034	63,420	67,156	88,519	36,525	43,659	43,149	52,503
ALL MFG. EX. PETROLEUM	38,803	45,893	52,014	68,993	28,505	31,819	33,549	41,325
DURABLE GOODS	22,365	26,644	33,089	43,339	16,427	18,512	21,316	26,035
Primary iron & steel	2,897	2,516	3,083	3,559	2,127	1,741	1,993	2,166
Primary nonferrous metals	1,723	1,979	1,381	1,941	1,268	1,356	883	1,161
Electrical machinery & equipment	2,853	3,189	4,421	5,859	2,095	2,209	2,849	3,528
Nonelectrical machinery	5,001	5,105	6,306	10,236	3,662	3,558	4,091	6,170
Motor vehicles & equipment	3,517	5,268	6,981	8,129	2,591	3,684	4,542	4,887
Other transportation equipment	1,253	1,864	2,911	3,817	918	1,294	1,860	2,250
Stone, clay & glass	1,220	1,943	2,311	2,367	901	1,354	1,497	1,442
Fabricated metals	1,150	1,104	1,625	1,846	847	768	1,055	1,120
Instruments & photo equipment	1,057	1,448	2,162	2,925	774	1,000	1,350	1,760
Other durable goods†	1,694	2,228	1,908	2,660	1,245	1,548	1,195	1,551
NONDURABLE GOODS	27,669	36,776	34,067	45,180	20,098	25,146	21,833	26,468
Food & beverages	3,834	4,966	4,898	6,640	2,807	3,438	3,167	3,940
Textiles	903	838	853	960	667	582	554	574
Paper & allied products	1,585	2,648	2,795	3,979	1,172	1,829	1,798	2,429
Chemicals & allied products	7,906	7,854	7,759	10,725	5,800	5,417	5,017	6,352
Petroleum & coal products	11,231	17,527	15,142	19,526	8,020	11,839	9,600	11,178
Rubber products	676	862	1,035	1,057	502	600	677	643
Other nondurable goods†	1,534	2,081	1,585	2,293	1,131	1,441	1,021	1,352
				—EXPENDITURES—				
ALL MANUFACTURING	47,055	52,498	58,356	73,126	34,318	36,158	37,439	43,318
ALL MFG. EX. PETROLEUM	34,504	38,148	43,861	56,250	25,341	26,444	28,263	33,646
DURABLE GOODS	19,046	22,120	26,414	35,230	13,975	15,363	16,999	21,130
Primary iron & steel	3,552	3,048	2,671	3,243	2,599	2,113	1,730	1,966
Primary nonferrous metals	1,349	1,416	1,433	1,685	992	978	914	1,004
Electrical machinery & equipment	2,445	3,064	3,668	4,918	1,796	2,117	2,359	2,957
Nonelectrical machinery	4,442	4,747	5,445	8,400	3,250	3,312	3,533	5,048
Motor vehicles & equipment	1,701	3,321	4,508	5,335	1,254	2,310	2,942	3,206
Other transportation equipment	1,136	1,361	2,051	2,908	833	947	1,312	1,712
Stone, clay & glass	1,117	1,275	1,944	2,407	826	888	1,258	1,465
Fabricated metals	894	935	1,237	1,614	655	651	804	979
Instruments & photo equipment	1,145	1,213	1,517	2,389	839	837	945	1,441
Other durable goods†	1,265	1,740	1,940	2,331	930	1,210	1,202	1,351
NONDURABLE GOODS	28,009	30,378	31,942	37,896	20,344	20,795	20,440	22,188
Food & beverages	3,666	3,882	4,217	5,037	2,685	2,685	2,727	2,989
Textiles	605	775	837	763	446	538	542	457
Paper & allied products	2,073	1,825	2,140	3,018	1,536	1,271	1,376	1,833
Chemicals & allied products	7,486	7,545	7,797	9,309	5,499	5,198	5,031	5,511
Petroleum & coal products	12,551	14,350	14,495	16,876	8,977	9,714	9,176	9,673
Rubber products	555	752	909	963	412	522	595	586
Other nondurable goods†	1,073	1,249	1,547	1,930	789	865	993	1,140

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1980-I are revised; data for 1980-II are preliminary.

As a result of the annual updating of seasonal adjustment factors, all data beginning 1979-I have been revised to incorporate new seasonal factors.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for 77% of all manufacturing corporations' assets in 1973.

Historical data from 1953 available on request from the Business Conditions Analysis Department: (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

The Conference Board
Quarterly Survey of Capital Investment
and Supply Conditions in Manufacturing

July 1980

Pressures on manufacturing capacity continued to ease between April and July, according to the latest Quarterly Survey of Capital Investment and Supply Conditions. Responses from the 1,000 largest manufacturers showed excess capacity up, the number of items on allocation down, and external supply shortages virtually nonexistent.

The percentage of companies (weighted by assets) viewing their capital facilities as "more than adequate" increased from 22% in April to 31% in July (Table 1). The most pronounced shifts into the "excess" category were in steel, nonferrous metals, motor vehicles, textiles, chemicals, rubber, and lumber. At 31%, the July "excess" figure was at its highest level since January 1976. The industries with the highest July figures were steel (92%), motor vehicles (85%), and rubber (54%). Among the companies with excess capacity, 84% reported their underutilization at 10% or more; in April, this figure was 74%. The most severe underutilization is in the steel industry. July reports of "inadequate" capacity were numerous in only two industries—nonelectrical machinery (65% of companies, weighted by assets) and nonautomotive transportation equipment (46%).

There was a sharp drop from April in the number of products that companies have put on allocation to their customers. Only the paper and petroleum industries still have any significant numbers of items on allocation, and the figure dropped from April in both industries. In petroleum, a good deal of the allocation is a direct result of government rules. Among the few items added to the allocation list in July were cotton-polyester fabric, seamless steel tube, and fire engines.

There was a slight increase in July in the overall percentage of companies (weighted by assets) whose investment programs will result in capacity expansion (Table 2). This reflected noticeable shifts toward "expansion" in textiles, paper, and rubber; the only notable shift toward "reduction" was in electrical equipment manufacturing.

In April, 31% of the companies reported that external capital funds were less available than three months earlier. This assessment shifted dramatically in July, when 27% reported easier funds availability and only 4% reported it tighter (Table 5). The latter group consisted mainly of companies in the steel, motor vehicle, and food industries.

TABLE 1. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1978	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980
					Inadequate					
All Manufacturing	19.6	19.5	18.4	19.2	21.3	20.4	16.1	14.2	13.7	12.4
Durable goods	29.5	30.7	30.4	30.7	29.8	25.0	17.0	16.4	17.9	15.9
Nondurable goods	7.5	7.5	6.7	8.3	13.4	15.6	15.0	12.1	9.7	9.0
					Sufficient					
All Manufacturing	62.2	62.4	64.3	67.6	65.9	68.4	64.0	69.1	64.6	56.3
Durable goods	53.8	56.8	56.6	61.8	64.0	63.4	59.8	60.8	53.8	46.2
Nondurable goods	72.3	68.4	71.8	73.1	67.7	73.7	68.9	77.0	74.9	66.3
					More Than Adequate					
All Manufacturing	18.2	18.1	17.2	13.2	12.8	11.1	19.9	16.7	21.7	31.2
Durable goods	16.7	12.5	12.9	7.5	6.2	11.5	23.2	22.8	28.3	37.8
Nondurable goods	20.1	24.1	21.4	18.6	18.9	10.7	16.1	10.9	15.4	24.7

TABLE 2. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1978	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980
					Expansion					
All Manufacturing	72.8	71.5	72.8	78.0	76.2	79.2	78.4	75.7	75.6	77.3
Durable goods	76.4	74.0	76.3	78.9	79.1	78.1	77.4	75.9	76.0	73.3
Nondurable goods	68.6	68.7	69.3	77.1	73.2	80.3	79.5	75.6	75.3	81.3
					No Change					
All Manufacturing	26.9	28.5	26.7	21.3	21.4	16.9	21.3	21.5	23.2	21.6
Durable goods	23.3	26.0	23.6	21.1	16.6	14.4	22.4	19.8	23.6	25.0
Nondurable goods	31.4	31.3	29.7	21.5	26.5	19.4	19.9	23.2	22.9	18.3
					Reduction					
All Manufacturing	0.2	0.0	0.5	0.7	2.3	3.9	0.3	2.7	1.2	1.1
Durable goods	0.4	0.0	0.0	0.1	4.3	7.5	0.2	4.3	0.4	1.7
Nondurable goods	0.0	0.0	0.9	1.4	0.3	0.3	0.6	1.2	1.9	0.4

TABLE 3. EXTERNAL SUPPLY SHORTAGES

Percent of Companies (weighted by assets) Reporting Lowered Production Because of Shortages

	Apr. 1978	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980
					Raw Materials					
All Manufacturing	2.9	0.7	0.5	3.1	11.1	11.1	7.0	9.7	4.5	3.7
Durable goods	1.0	0.8	0.3	0.2	0.7	1.4	0.4	0.9	0.2	0.6
Nondurable goods	5.3	0.6	0.7	5.9	20.9	21.2	14.8	18.3	8.7	6.7
					Processed Goods					
All Manufacturing	0.3	0.2	0.6	0.5	0.2	0.3	1.4	1.3	1.5	0.2
Durable goods	0.5	0.2	0.0	1.1	0.4	0.6	2.4	1.7	2.9	0.3
Nondurable goods	0.1	0.1	1.1	0.0	0.0	0.0	0.2	1.0	0.1	0.0
					Both					
All Manufacturing	0.1	0.3	0.2	0.7	2.8	5.4	3.1	3.0	4.2	1.5
Durable goods	0.1	0.4	0.3	0.2	0.2	0.4	0.1	1.8	1.2	1.8
Nondurable goods	0.0	0.1	0.2	1.2	5.2	10.8	6.6	4.2	7.1	1.2

TABLE 4. ANTICIPATED SOURCES OF FUNDS FOR CAPITAL EXPENDITURES

Percent Distribution of Responding Companies Weighted by Assets

	1977		1978		1979		1980		1981
	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half (r)	First Half (p)
From Internal Sources									
All Manufacturing	88.5	88.5	85.0	88.7	89.2	88.6	83.7	82.4	82.0
Durable goods	88.1	89.1	89.8	91.1	89.7	87.9	77.8	80.6	80.7
Nondurable goods	89.0	87.9	79.1	86.0	88.6	89.5	89.2	84.3	83.4
From External Sources									
All Manufacturing	11.5	11.5	15.0	11.3	10.8	11.4	16.3	17.6	18.0
Durable goods	11.9	10.9	10.2	8.9	10.3	12.1	22.2	19.4	19.3
Nondurable goods	11.0	12.1	20.9	14.0	11.4	10.5	10.8	15.7	16.6

TABLE 5. AVAILABILITY OF EXTERNAL CAPITAL FUNDS COMPARED WITH THREE MONTHS EARLIER

Percent Distribution of Responding Companies

	Apr. 1978	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980
Easier										
All Manufacturing	5.7	3.4	4.3	3.1	4.1	4.4	2.2	4.5	1.3	26.9
Durable goods	6.8	4.8	4.7	3.5	5.2	5.5	2.1	3.0	1.0	26.6
Nondurable goods	4.6	1.7	3.8	2.7	2.8	3.3	2.2	6.0	1.6	27.1
Same										
All Manufacturing	89.3	95.3	82.2	83.5	89.2	89.6	74.2	84.0	67.3	68.9
Durable goods	87.0	83.7	82.9	82.2	88.0	88.5	75.0	85.3	68.2	69.7
Nondurable goods	92.0	87.2	81.3	84.9	90.4	90.8	73.4	82.6	66.3	68.1
Tighter										
All Manufacturing	4.9	11.4	13.5	13.4	6.8	6.0	23.7	11.5	31.4	4.3
Durable goods	6.3	11.5	12.3	14.4	6.8	6.0	22.9	11.7	30.8	3.7
Nondurable goods	3.4	11.2	14.8	12.4	6.7	6.0	24.5	11.4	32.1	4.8

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Manufacturing Investment Statistics

Capital Appropriations

Third Quarter 1980

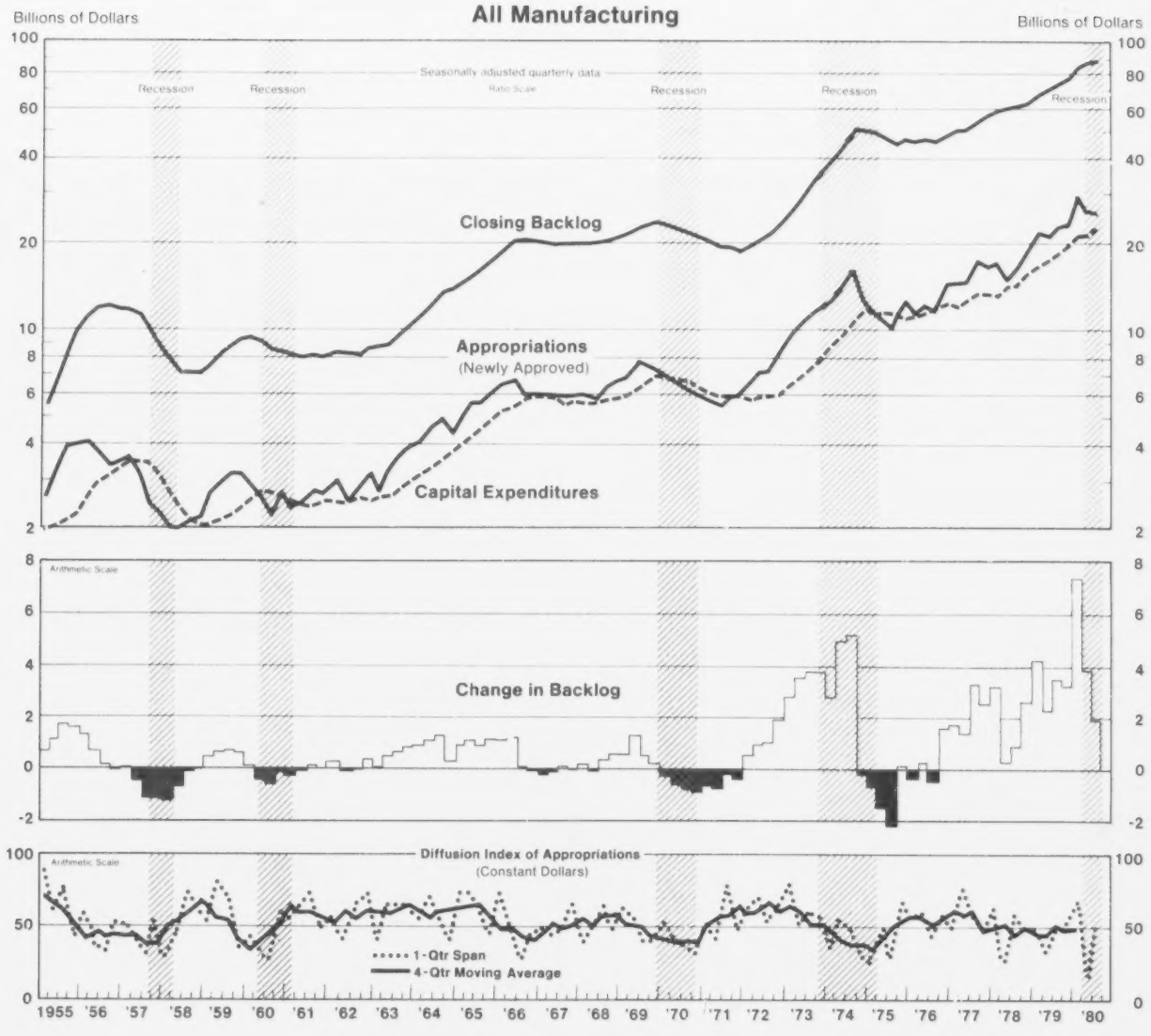
and

Capital Investment and Supply Conditions

October 1980

THE CONFERENCE BOARD

CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION



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The Conference Board

Quarterly Survey of Capital Appropriations

Third Quarter 1980

Capital appropriations of the nation's 1,000 largest manufacturers fell 3.6% in the third quarter of 1980. Appropriations had declined 12.3% in the second quarter, but risen a huge 26.7% in the first. Capital spending rose 6.9% in the third quarter, following no change in the second and an 8.4% rise in the first. The huge petroleum industry recorded a modest decline in appropriations in the third quarter, following two quarters of big gains; petroleum industry spending rose 13.9%. Excluding petroleum, manufacturers' appropriations fell only 1.6% in the third quarter while their spending rose only 4.8%.

The first quarter of 1980 saw very large increases in appropriations in many industries. Consequently, even though appropriations dropped in the following two quarters, the figure in the third quarter was 7.1% above that in the fourth quarter of 1979. Excluding petroleum, appropriations in the third quarter were down only 8.6% from end-1979. This is a rather strong showing for a recession year. However, even though the recession is apparently over, it's entirely possible that appropriations will drop further, since the historical pattern is for appropriations to turn upward after the turn in overall economic activity. *The 1,000 companies' spending has been rising in 1980 but is still well below the level of appropriations. Consequently, the backlog of unspent appropriations has risen, which is unusual in a recession year. For the full year 1980, both appropriations and expenditures of the large manufacturers will record sizable increases from 1979. For 1981, the respondents' expectations point to smaller percentage gains for both appropriations and expenditures.*

Developments in the Third Quarter

Total appropriations fell 3.6% in the quarter to $24.9 billion (seasonally adjusted). Appropriations fell 7.3% in the petroleum industry and 14.7% in the rest of nondurables manufacturing, but rose 8.2% in durables after a very big drop in the second quarter. The rebound in durables put appropriations in that sector back near the level prevailing in the second half of 1979.

The third-quarter drop in petroleum appropriations was not surprising, in view of the enormous gains in the year's first two quarters (34% and 29%, respectively). In several other nondurables industries, third-quarter changes in appropriations likewise reflected offsets to previous large moves—down in the third quarter in food following a large rise, and up in textiles, paper and rubber following large declines.

Capital spending rose in most industries in the third quarter. The exceptions were three industries where spending has been in the doldrums all year—steel, nonelectrical machinery, and stone-clay-glass—plus the paper industry. *Total capital spending by the 1,000 largest manufacturers rose 6.9% in the third quarter following no change in the second.*

Cancellations and adjustments of appropriations amounted to only $257 million in the third quarter. The unusually small size of this figure reflected a substantial positive adjustment (that is, a "negative cancellation") in the nonelectrical machinery industry, as one company corrected previous underreporting of appropriations. *Net appropriations in the third quarter were $24.7 billion, down 1.9% from the second quarter. With capital spending amounting to $22.8 billion in the quarter, the backlog of unspent appropriations rose $2.0 billion and was $13.2 billion above the end-1979 level.*

1980 Prospects and the Outlook for 1981

In the first three quarters of 1980, the 1,000 largest manufacturers' capital appropriations and capital outlays were both up 23% from the same period in 1979. The third-quarter survey did not ask for expectations regarding full-year 1980 totals; only 1981 expectations were surveyed. However, percent changes for the full year 1980 have been estimated on the basis of data through the third quarter plus the companies' mid-1980 expectations. These estimates, shown in Table 4, are: appropriations up 16% from 1979, but only 5% excluding petroleum; expenditures up 23% (21% excluding petroleum). The 1979 increases were 32% for appropriations and 25% for spending. Expectations for 1980 started off weak and strengthened as the year progessed—unusual behavior in a recession.

The 1981 percent changes shown in Table 4 are calculated by relating the 1,000 manufacturers' 1981 expectations to the estimated 1980 totals. *Appropriations are expected to rise 13% in 1981 (5% excluding the booming petroleum industry) and spending 17% (12% excluding petroleum).* Since capital investment tends to "lag" the overall economy, continuing to weaken after economic activity turns upward, a weaker showing in 1981 than 1980 would not be very surprising.

Lora S. Collins

TABLE 1. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES
Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	IV-79 to I-80	I-80 to II-80	II-80 to III-80	III-79 to III-80	IV-79 to I-80	I-80 to II-80	II-80 to III-80	III-79 to III-80
				—APPROPRIATIONS—				
ALL MANUFACTURING	26.7	—12.3	— 3.6	9.9	23.6	—13.0	—5.1	4.1
ALL MFG. EX PETROLEUM	24.6	—25.4	— 1.6	— 4.0	21.0	—26.5	— 4.1	—10.9
DURABLE GOODS	25.7	—33.8	8.2	— 1.5	21.7	—35.2	6.0	— 8.7
Primary iron & steel	6.1	—56.6	72.3	—11.5	5.2	—57.7	67.9	—17.6
Primary nonferrous metals	215.2	—20.6	— 5.5	73.9	207.7	—22.0	— 7.5	61.1
Electrical machinery & equipment	8.0	— 0.4	— 0.9	31.4	4.5	— 2.0	— 3.4	21.9
Nonelectrical machinery	70.0	—42.2	— 0.8	—23.9	64.2	—44.3	— 1.9	—29.1
Motor vehicles & equipment	—20.9	—42.1	1.0	—15.9	—24.8	—42.7	— 2.8	—22.9
Other transportation equipment	65.6	—45.0	2.9	—10.6	65.6	—47.8	— 0.2	—20.5
Stone, clay & glass	49.9	—56.6	7.7	—24.1	48.1	—57.4	6.3	—27.9
Fabricated metals	—35.6	— 4.3	45.5	21.9	—36.8	— 7.1	41.8	11.8
Instruments & photo equipment	—18.0	3.2	61.3	50.0	—18.1	— 0.1	61.7	43.7
Other durable goods†	78.6	—37.9	— 9.0	—25.0	66.2	—36.1	—11.3	—30.4
NONDURABLE GOODS	27.7	8.2	—10.6	19.6	25.5	8.7	—11.6	15.3
Food & beverages	—18.4	32.4	—42.3	—23.6	—18.7	30.3	—44.0	—28.3
Textiles	—27.0	—34.5	38.7	9.7	—28.3	—36.5	39.3	5.0
Paper & allied products	147.7	—51.3	24.8	0.7	141.9	—52.5	22.5	— 6.4
Chemicals & allied products	12.8	1.3	—11.1	— 6.1	11.0	— 0.7	—14.9	—13.8
Petroleum & coal products	34.2	29.0	— 7.3	52.5	32.9	31.2	— 6.9	52.3
Rubber products	51.3	—25.5	16.4	—24.4	47.5	—26.3	14.5	—28.2
Other nondurable goods†	78.8	—33.7	—14.0	14.2	64.7	—27.4	—17.3	6.0
				—EXPENDITURES—				
ALL MANUFACTURING	8.4	0.0	6.9	21.7	6.0	— 1.0	4.9	14.8
ALL MFG. EX PETROLEUM	7.5	0.1	4.8	17.4	4.7	— 1.7	2.0	8.8
DURABLE GOODS	6.9	— 2.9	5.8	16.5	3.9	— 5.2	3.5	7.8
Primary iron & steel	2.8	— 8.9	— 8.8	5.3	1.9	—11.3	—11.2	— 2.1
Primary nonferrous metals	1.7	9.5	63.8	108.7	— 0.8	7.5	60.2	93.5
Electrical machinery & equipment	4.4	11.8	15.5	42.4	1.0	10.0	12.6	32.1
Nonelectrical machinery	0.5	— 0.2	— 0.7	4.0	— 2.9	— 3.8	— 1.8	— 3.1
Motor vehicles & equipment	2.4	—10.1	6.2	— 2.5	— 2.6	—11.0	2.2	—10.6
Other transportation equipment	31.5	— 8.5	0.0	30.9	31.5	—13.2	— 3.1	16.4
Stone, clay & glass	— 1.1	— 3.9	— 7.6	— 1.9	— 2.3	— 5.7	— 8.7	— 7.2
Fabricated metals	11.8	—14.1	2.1	— 0.7	9.8	—16.6	— 0.5	— 9.2
Instruments & photo equipment	12.9	— 4.0	5.4	19.8	12.7	— 7.1	5.7	14.8
Other durable goods†	26.6	— 7.9	2.5	12.4	17.8	— 5.2	— 0.1	4.4
NONDURABLE GOODS	9.8	2.8	7.9	26.7	8.1	3.0	6.2	21.6
Food & beverages	17.5	3.0	2.4	18.2	17.1	1.4	— 0.6	10.9
Textiles	18.3	0.9	14.4	15.0	16.2	— 2.1	14.9	11.2
Paper & allied products	12.1	8.9	— 9.9	9.8	9.5	6.2	—11.6	2.1
Chemicals & allied products	3.4	2.9	8.4	24.3	1.7	0.9	3.7	14.1
Petroleum & coal products	11.4	— 0.3	13.9	37.0	10.3	1.4	14.4	36.8
Rubber products	1.4	— 8.9	11.7	— 8.8	— 1.2	— 9.9	9.8	—12.8
Other nondurable goods†	5.0	26.1	— 3.3	25.7	— 3.2	38.1	— 7.0	17.1

See General Notes on page 7.

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Quarterly Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	IV-79	I-80	II-80	III-80	IV-79	I-80	II-80	III-80
ALL MANUFACTURING								
Opening backlog	73,446	76,662	84,086	87,940	72,847	74,718	78,893	81,053
Newly approved	23,279	29,503	25,865	24,926	13,519	16,710	14,533	13,793
Canceled	416	783	712	257	235	440	400	146
Capital expenditure	19,647	21,296	21,299	22,773	11,414	12,095	11,973	12,565
Closing backlog	76,662	84,086	87,940	89,836	74,718	73,893	81,053	82,135
DURABLE GOODS								
Opening backlog	37,162	39,000	42,524	41,814	36,477	37,565	39,574	39,171
Newly approved	11,470	14,420	9,548	10,333	6,786	8,262	5,351	5,674
Canceled	—15	580	241	—46	—9	326	134	—25
Capital expenditure	9,647	10,316	10,017	10,596	5,707	5,927	5,621	5,817
Closing backlog	39,000	42,524	41,814	41,597	37,565	39,574	39,171	39,053
Primary iron & steel								
Opening backlog	4,409	4,452	4,378	3,858	5,702	5,727	5,684	5,387
Newly approved	918	974	423	729	544	572	242	406
Canceled	—128	17	4	—32	—76	10	2	—18
Capital expenditure	1,003	1,031	939	856	594	605	537	477
Closing backlog	4,452	4,378	3,858	3,763	5,727	5,684	5,387	5,334
Primary nonferrous metals								
Opening backlog	3,059	2,934	3,629	3,951	3,369	3,296	3,692	3,871
Newly approved	388	1,223	971	918	226	695	542	501
Canceled	37	44	119	42	22	25	66	23
Capital expenditure	476	484	530	868	277	275	296	474
Closing backlog	2,934	3,629	3,951	3,959	3,296	3,692	3,871	3,876
Electrical machinery & equipment								
Opening backlog	3,308	3,641	4,026	4,263	3,748	3,945	4,165	4,298
Newly approved	1,688	1,823	1,815	1,798	998	1,042	1,021	986
Canceled	8	32	6	10	5	18	3	5
Capital expenditure	1,347	1,406	1,572	1,816	796	804	885	996
Closing backlog	3,641	4,026	4,263	4,235	3,945	4,165	4,298	4,283
Nonelectrical machinery								
Opening backlog	7,394	6,979	7,802	7,346	6,397	6,148	6,625	6,370
Newly approved	1,962	3,335	1,928	1,912	1,177	1,932	1,076	1,056
Canceled	33	157	34	—200	20	91	19	—110
Capital expenditure	2,344	2,355	2,350	2,334	1,406	1,364	1,312	1,289
Closing backlog	6,979	7,802	7,346	7,124	6,148	6,625	6,370	6,248
Motor vehicles & equipment								
Opening backlog	8,610	10,113	10,979	11,011	7,259	8,157	8,649	8,667
Newly approved	2,920	2,309	1,337	1,351	1,745	1,313	752	731
Canceled	—12	—20	—10	19	—7	—11	—6	10
Capital expenditure	1,429	1,463	1,315	1,396	854	832	740	756
Closing backlog	10,113	10,979	11,011	10,947	8,157	8,649	8,667	8,632
Other transportation equipment								
Opening backlog	2,937	3,062	3,503	3,316	2,489	2,561	2,813	2,711
Newly approved	941	1,558	857	882	538	891	465	464
Canceled	6	52	70	15	3	30	38	8
Capital expenditure	810	1,065	974	974	463	609	528	512
Closing backlog	3,062	3,503	3,316	3,209	2,561	2,813	2,711	2,655
Stone, clay & glass								
Opening backlog	2,431	2,347	2,557	2,308	2,454	2,404	2,528	2,384
Newly approved	563	844	366	394	335	496	211	225
Canceled	7	1	7	65	4	1	4	37
Capital expenditure	640	633	608	562	381	372	351	320
Closing backlog	2,347	2,557	2,308	2,075	2,404	2,528	2,384	2,251
Fabricated metals								
Opening backlog	1,518	1,607	1,489	1,462	1,575	1,627	1,559	1,544
Newly approved	503	324	310	451	296	187	174	247
Canceled	8	—12	—53	16	5	—7	—30	9
Capital expenditure	406	454	390	398	239	263	219	218
Closing backlog	1,607	1,489	1,462	1,499	1,627	1,559	1,544	1,564

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	IV-79	I-80	II-80	III-80	IV-79	I-80	II-80	III-80
Instruments & photo equipment								
Opening backlog	1,281	1,468	1,434	1,408	1,289	1,398	1,378	1,363
Newly approved	833	683	705	1,137	485	397	397	641
Canceled	32	24	66	14	19	14	37	8
Capital expenditure	614	693	665	701	358	403	374	395
Closing backlog	1,468	1,434	1,408	1,830	1,398	1,378	1,363	1,601
Other durable goods†								
Opening backlog	2,215	2,397	2,727	2,891	2,195	2,302	2,483	2,575
Newly approved	754	1,347	836	761	443	736	470	417
Canceled	—6	285	—2	5	—4	156	—1	3
Capital expenditure	578	732	674	691	340	400	379	379
Closing backlog	2,397	2,727	2,891	2,956	2,302	2,483	2,575	2,610
NONDURABLE GOODS								
Opening backlog	36,284	37,662	41,562	46,126	36,370	37,153	39,319	41,882
Newly approved	11,809	15,083	16,317	14,593	6,733	8,448	9,181	8,118
Canceled	431	203	471	303	244	114	267	171
Capital expenditure	10,000	10,980	11,282	12,177	5,707	6,168	6,352	6,748
Closing backlog	37,662	41,562	46,126	48,239	37,153	39,319	41,882	43,081
Food & beverages								
Opening backlog	4,455	5,069	5,025	5,213	4,286	4,640	4,615	4,721
Newly approved	1,948	1,590	2,105	1,214	1,124	914	1,192	667
Canceled	53	129	367	—48	31	74	208	—26
Capital expenditure	1,281	1,505	1,550	1,587	739	865	877	872
Closing backlog	5,069	5,025	5,213	4,888	4,640	4,615	4,721	4,542
Textiles								
Opening backlog	573	720	751	702	699	786	804	776
Newly approved	341	249	163	226	201	144	92	127
Canceled	14	5	—3	9	8	3	—2	5
Capital expenditure	180	213	215	246	106	123	121	139
Closing backlog	720	751	702	673	786	804	776	760
Paper & allied products								
Opening backlog	4,331	4,166	4,905	4,624	4,040	3,942	4,371	4,212
Newly approved	642	1,590	774	966	382	925	439	538
Canceled	16	—36	89	16	10	—21	50	9
Capital expenditure	791	887	966	870	471	516	548	485
Closing backlog	4,166	4,905	4,624	4,704	3,942	4,371	4,212	4,256
Chemicals & allied products								
Opening backlog	8,267	8,450	8,939	9,377	8,666	8,772	9,052	9,296
Newly approved	2,750	3,103	3,142	2,794	1,596	1,771	1,757	1,496
Canceled	46	8	22	33	27	5	12	18
Capital expenditure	2,521	2,606	2,682	2,906	1,463	1,487	1,500	1,556
Closing backlog	8,450	8,939	9,377	9,232	8,772	9,052	9,296	9,219
Petroleum and coal products								
Opening backlog	15,539	16,009	17,977	22,114	15,671	15,933	17,020	19,343
Newly approved	5,275	7,078	9,133	8,468	2,941	3,908	5,129	4,777
Canceled	297	88	—10	301	166	49	—6	170
Capital expenditure	4,508	5,022	5,006	5,703	2,514	2,773	2,811	3,217
Closing backlog	16,009	17,977	22,114	24,578	15,933	17,020	19,343	20,733
Rubber products								
Opening backlog	994	944	1,011	1,007	1,088	1,058	1,097	1,095
Newly approved	189	286	213	248	113	167	123	140
Canceled	17	—6	12	22	10	—3	7	12
Capital expenditure	222	225	205	229	133	131	118	130
Closing backlog	944	1,011	1,007	1,004	1,058	1,097	1,095	1,093
Other nondurable goods†								
Opening backlog	2,125	2,304	2,954	3,089	1,920	2,022	2,361	2,438
Newly approved	664	1,187	787	677	376	619	450	372
Canceled	—12	15	—6	—30	—7	8	—3	—16
Capital expenditure	497	522	658	636	281	272	376	350
Closing backlog	2,304	2,954	3,089	3,160	2,022	2,361	2,438	2,477

See General Notes on page 7.

TABLE 3. PROPORTION OF APPROPRIATIONS FOR PLANT

Percent

	78-III	78-IV	79-I	79-II	79-III	79-IV	80-I	80-II	80-III
ALL MANUFACTURING	24	24	21	24	21	21	23	21	23
DURABLE GOODS	25	25	20	24	19	17	19	22	23
Primary iron and steel	12	15	13	9	13	15	8	12	16
Primary nonferrous metals	38	26	25	22	22	24	25	24	25
Electrical machinery & equipment	31	24	18	19	20	16	22	20	23
Nonelectrical machinery	21	23	20	29	19	8	15	24	20
Motor vehicles & equipment	12	13	30	17	21	10	25	20	29
Other transportation equipment	34	17	27	44	20	34	22	38	42
Stone, clay & glass	14	32	14	12	10	12	7	7	5
Fabricated metals	17	12	11	14	13	18	16	21	24
Instruments & photo equipment	37	52	11	10	23	24	13	20	10
Other durable goods	67	77	62	64	21	19	45	20	23
NONDURABLE GOODS	22	22	24	24	23	25	28	18	24
Food & beverages	24	18	25	26	26	29	19	17	22
Textiles	22	16	16	25	26	17	15	21	10
Paper & allied products	12	19	12	15	12	12	13	16	16
Chemicals & allied products	20	29	24	34	28	26	23	23	34
Rubber products	4	15	13	11	18	10	12	8	8
Other nondurable goods	35	17	39	19	20	39	68	12	22

Based on data from those companies that report appropriations for plant and equipment separately. The composition of this group varies slightly from quarter to quarter. Petroleum industry is excluded. Historical data from 1959 available on request.

See also General Notes on page 7.

TABLE 4. PERCENT CHANGE IN CAPITAL APPROPRIATIONS AND EXPENDITURES: 1979 ACTUAL, 1980 ESTIMATED AND 1981 EXPECTED*

	Appropriations			Expenditures		
	1979	1980	1981	1979	1980	1981
All Manufacturing	32	16	13	25	23	17
All Manufacturing except Petroleum	33	5	5	28	21	12
Durable goods	31	4	—2	33	21	4
Nondurable goods	33	28	24	19	26	28
Petroleum	29	55	32	16	30	32
Other	36	8	15	20	22	25

*Estimates for 1980 are based on three quarters of data plus the respondents' mid-1980 expectations. Expectations for 1981 are based on the survey respondents' answers to a question about their expectations.

See also General Notes on page 7.

TABLE 5. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS
In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1976	1977	1978	1979	1976	1977	1978	1979
				—APPROPRIATIONS—				
ALL MANUFACTURING	50,034	63,420	67,156	88,519	36,525	43,659	43,149	52,503
ALL MFG. EX. PETROLEUM	38,803	45,893	52,014	68,993	28,505	31,819	33,549	41,325
DURABLE GOODS	22,365	26,644	33,089	43,339	16,427	18,512	21,316	26,035
Primary iron & steel	2,897	2,516	3,083	3,559	2,127	1,741	1,993	2,166
Primary nonferrous metals	1,723	1,979	1,381	1,941	1,268	1,356	883	1,161
Electrical machinery & equipment	2,853	3,189	4,421	5,859	2,095	2,209	2,849	3,528
Nonelectrical machinery	5,001	5,105	6,306	10,236	3,662	3,558	4,091	6,170
Motor vehicles & equipment	3,517	5,268	6,981	8,129	2,591	3,684	4,542	4,887
Other transportation equipment	1,253	1,864	2,911	3,817	918	1,294	1,860	2,250
Stone, clay & glass	1,220	1,943	2,311	2,367	901	1,354	1,497	1,442
Fabricated metals	1,150	1,104	1,625	1,846	847	768	1,055	1,120
Instruments & photo equipment	1,057	1,448	2,162	2,925	774	1,000	1,350	1,760
Other durable goods†	1,694	2,228	1,908	2,660	1,245	1,548	1,195	1,551
NONDURABLE GOODS	27,669	36,776	34,067	45,180	20,098	25,146	21,833	26,468
Food & beverages	3,834	4,966	4,898	6,640	2,807	3,438	3,167	3,940
Textiles	903	838	853	960	667	582	554	574
Paper & allied products	1,585	2,648	2,795	3,979	1,172	1,829	1,798	2,429
Chemicals & allied products	7,906	7,854	7,759	10,725	5,800	5,417	5,017	6,352
Petroleum & coal products	11,231	17,527	15,142	19,526	8,020	11,839	9,600	11,178
Rubber products	676	862	1,035	1,057	502	600	677	643
Other nondurable goods†	1,534	2,081	1,585	2,293	1,131	1,441	1,021	1,352
				—EXPENDITURES—				
ALL MANUFACTURING	47,055	52,498	58,356	73,126	34,318	36,158	37,439	43,318
ALL MFG. EX. PETROLEUM	34,504	38,148	43,861	56,250	25,341	26,444	28,263	33,646
DURABLE GOODS	19,046	22,120	26,414	35,230	13,975	15,363	16,999	21,130
Primary iron & steel	3,552	3,048	2,671	3,243	2,599	2,113	1,730	1,966
Primary nonferrous metals	1,349	1,416	1,433	1,685	992	978	914	1,004
Electrical machinery & equipment	2,445	3,064	3,668	4,918	1,796	2,117	2,359	2,957
Nonelectrical machinery	4,442	4,747	5,445	8,400	3,250	3,312	3,533	5,048
Motor vehicles & equipment	1,701	3,321	4,508	5,335	1,254	2,310	2,942	3,206
Other transportation equipment	1,136	1,361	2,051	2,908	833	947	1,312	1,712
Stone, clay & glass	1,117	1,275	1,944	2,407	826	888	1,258	1,465
Fabricated metals	894	935	1,237	1,614	655	651	804	979
Instruments & photo equipment	1,145	1,213	1,517	2,389	839	837	945	1,441
Other durable goods†	1,265	1,740	1,940	2,331	930	1,210	1,202	1,351
NONDURABLE GOODS	28,009	30,378	31,942	37,896	20,344	20,795	20,440	22,188
Food & beverages	3,666	3,882	4,217	5,037	2,685	2,685	2,727	2,989
Textiles	605	775	837	763	446	538	542	457
Paper & allied products	2,073	1,825	2,140	3,018	1,536	1,271	1,376	1,833
Chemicals & allied products	7,486	7,545	7,797	9,309	5,499	5,198	5,031	5,511
Petroleum & coal products	12,551	14,350	14,495	16,876	8,977	9,714	9,176	9,673
Rubber products	555	752	909	963	412	522	595	586
Other nondurable goods†	1,073	1,249	1,547	1,930	789	865	993	1,140

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1980-II are revised; data for 1980-III are preliminary.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for 77% of all manufacturing corporations' assets in 1973.

Historical data from 1953 available on request from the Business Conditions Analysis Department: (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

The Conference Board
Quarterly Survey of Capital Investment
and Supply Conditions in Manufacturing

October 1980

Excess capacity among the thousand largest manufacturers remained as high in October as it had been in July, according to the latest Quarterly Survey of Capital Investment and Supply Conditions. However, more than three-fourths of the respondents were still planning to expand their capital facilities. Reports of products on allocation by the manufacturers continued to decline except for petroleum products.

Although reports of "more than adequate" capital facilities are not as prevalent among the respondents as they were in the winter of 1975-76, 31% of companies (weighted by assets) were in this category in October, unchanged from July (Table 1). Steel (88%) and motor vehicles (81%) were still the industries where the most excess capacity existed. Some of the rubber companies reduced their excess capacity between July and October while reports of excess increased among stone-clay-glass producers. Overall, 88% of the firms reporting excess capacity were underutilized by more than 10% this October, up from 84% in July. Nonelectrical machinery was the only industry where firms owning more than half the industry's assets reported "inadequate" capacity.

Products on allocation by manufacturers continued to diminish in number in October. New items: space heaters, special electrical equipment for use in nuclear plant security systems, and steel pipe for oil and gas wells and transmission. The petroleum and paper industries still report the most numerous allocations, and this is reflected in the answers to the question about external supply shortages (Table 3). Only in petroleum and publishing did more than two companies indicate shortage of raw materials. In nearly every case, the external shortages resulted in a less-than-10% lowering of overall production.

Anticipated use of internal funds for capital expenditures in the first half of 1981 was revised downward in most nondurables industries and revised upward in most durables industries (Table 4). As of October, the respondents expected to resort to external sources for 19% of their capital investment funds in first half 1981—the highest percentage since 1974. Paper, chemicals, petroleum and rubber brought the percentage up. Availability of external funds in October was largely perceived as unchanged from three months earlier, when there had been a marked easing of access to external funds (Table 5).

M. Nichols

TABLE 1. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980
					Inadequate					
All Manufacturing	19.5	18.4	19.2	21.3	20.4	16.1	14.2	13.7	12.4	12.4
Durable goods	30.7	30.4	30.7	29.8	25.0	17.0	16.4	17.9	15.9	16.7
Nondurable goods	7.5	6.7	8.3	13.4	15.6	15.0	12.1	9.7	9.0	8.6
					Sufficient					
All Manufacturing	62.4	64.3	67.6	65.9	68.4	64.0	69.1	64.6	56.3	57.0
Durable goods	56.8	56.6	61.8	64.0	63.4	59.8	60.8	53.8	46.2	44.0
Nondurable goods	68.4	71.8	73.1	67.7	73.7	68.9	77.0	74.9	66.3	68.4
					More Than Adequate					
All Manufacturing	18.1	17.2	13.2	12.8	11.1	19.9	16.7	21.7	31.2	30.6
Durable goods	12.5	12.9	7.5	6.2	11.5	23.2	22.8	28.3	37.8	39.3
Nondurable goods	24.1	21.4	18.6	18.9	10.7	16.1	10.9	15.4	24.7	22.9

TABLE 2. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980
					Expansion					
All Manufacturing	71.5	72.8	78.0	76.2	79.2	78.4	75.7	75.6	77.3	77.4
Durable goods	74.0	76.3	78.9	79.1	78.1	77.4	75.9	76.0	73.3	74.0
Nondurable goods	68.7	69.3	77.1	73.2	80.3	79.5	75.6	75.3	81.3	80.4
					No Change					
All Manufacturing	28.5	26.7	21.3	21.4	16.9	21.3	21.5	23.2	21.6	22.0
Durable goods	26.0	23.6	21.1	16.6	14.4	22.4	19.8	23.6	25.0	25.9
Nondurable goods	31.3	29.7	21.5	26.5	19.4	19.9	23.2	22.9	18.3	18.6
					Reduction					
All Manufacturing	0.0	0.5	0.7	2.3	3.9	0.3	2.7	1.2	1.1	0.5
Durable goods	0.0	0.0	0.1	4.3	7.5	0.2	4.3	0.4	1.7	0.1
Nondurable goods	0.0	0.9	1.4	0.3	0.3	0.6	1.2	1.9	0.4	0.9

TABLE 3. EXTERNAL SUPPLY SHORTAGES

Percent of Companies (weighted by assets) Reporting Lowered Production Because of Shortages

	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980
					Raw Materials					
All Manufacturing	0.7	0.5	3.1	11.1	11.1	7.0	9.7	4.5	3.7	2.3
Durable goods	0.8	0.3	0.2	0.7	1.4	0.4	0.9	0.2	0.6	0.3
Nondurable goods	0.6	0.7	5.9	20.9	21.2	14.8	18.3	8.7	6.7	4.0
					Processed Goods					
All Manufacturing	0.2	0.6	0.5	0.2	0.3	1.4	1.3	1.5	0.2	0.5
Durable goods	0.2	0.0	1.1	0.4	0.6	2.4	1.7	2.9	0.3	1.0
Nondurable goods	0.1	1.1	0.0	0.0	0.0	0.2	1.0	0.1	0.0	0.0
					Both					
All Manufacturing	0.3	0.2	0.7	2.8	5.4	3.1	3.0	4.2	1.5	1.6
Durable goods	0.4	0.3	0.2	0.2	0.4	0.1	1.8	1.2	1.8	2.0
Nondurable goods	0.1	0.2	1.2	5.2	10.8	6.6	4.2	7.1	1.2	1.2

TABLE 4. ANTICIPATED SOURCES OF FUNDS FOR CAPITAL EXPENDITURES

Percent Distribution of Responding Companies Weighted by Assets

	1977		1978		1979		1980		1981
	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half (r)	First Half (r)
From Internal Sources									
All Manufacturing	88.5	88.5	85.0	88.7	89.2	88.6	83.7	83.2	80.7
Durable goods	88.1	89.1	89.8	91.1	89.7	87.9	77.8	83.7	83.8
Nondurable goods	89.0	87.9	79.1	86.0	88.6	89.5	89.2	82.8	77.9
From External Sources									
All Manufacturing	11.5	11.5	15.0	11.3	10.8	11.4	16.3	16.8	19.3
Durable goods	11.9	10.9	10.2	8.9	10.3	12.1	22.2	16.3	16.2
Nondurable goods	11.0	12.1	20.9	14.0	11.4	10.5	10.8	17.2	22.1

TABLE 5. AVAILABILITY OF EXTERNAL CAPITAL FUNDS COMPARED WITH THREE MONTHS EARLIER

Percent Distribution of Responding Companies

	July 1978	Oct. 1978	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980
Easier										
All Manufacturing	3.4	4.3	3.1	4.1	4.4	2.2	4.5	1.3	26.9	6.8
Durable goods	4.8	4.7	3.5	5.2	5.5	2.1	3.0	1.0	26.6	7.4
Nondurable goods	1.7	3.8	2.7	2.8	3.3	2.2	6.0	1.6	27.1	6.0
Same										
All Manufacturing	95.3	82.2	83.5	89.2	89.6	74.2	84.0	67.3	68.9	83.5
Durable goods	83.7	82.9	82.2	88.0	88.5	75.0	85.3	68.2	69.7	81.9
Nondurable goods	87.2	81.3	84.9	90.4	90.8	73.4	82.6	66.3	68.1	85.2
Tighter										
All Manufacturing	11.4	13.5	13.4	6.8	6.0	23.7	11.5	31.4	4.3	9.7
Durable goods	11.5	12.3	14.4	6.8	6.0	22.9	11.7	30.8	3.7	10.6
Nondurable goods	11.2	14.8	12.4	6.7	6.0	24.5	11.4	32.1	4.8	8.8

Please Note: In the interest of speeding the data contained in this publication to you, these series are now available on-line through The Conference Board Data Base. For more information, call Linette Stein at (212) 759-0900.

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Manufacturing Investment Statistics

Capital Appropriations

First Quarter 1981

and

Capital Investment and Supply Conditions

April 1981

THE CONFERENCE BOARD, INC.
845 Third Avenue
New York, N.Y. 10022

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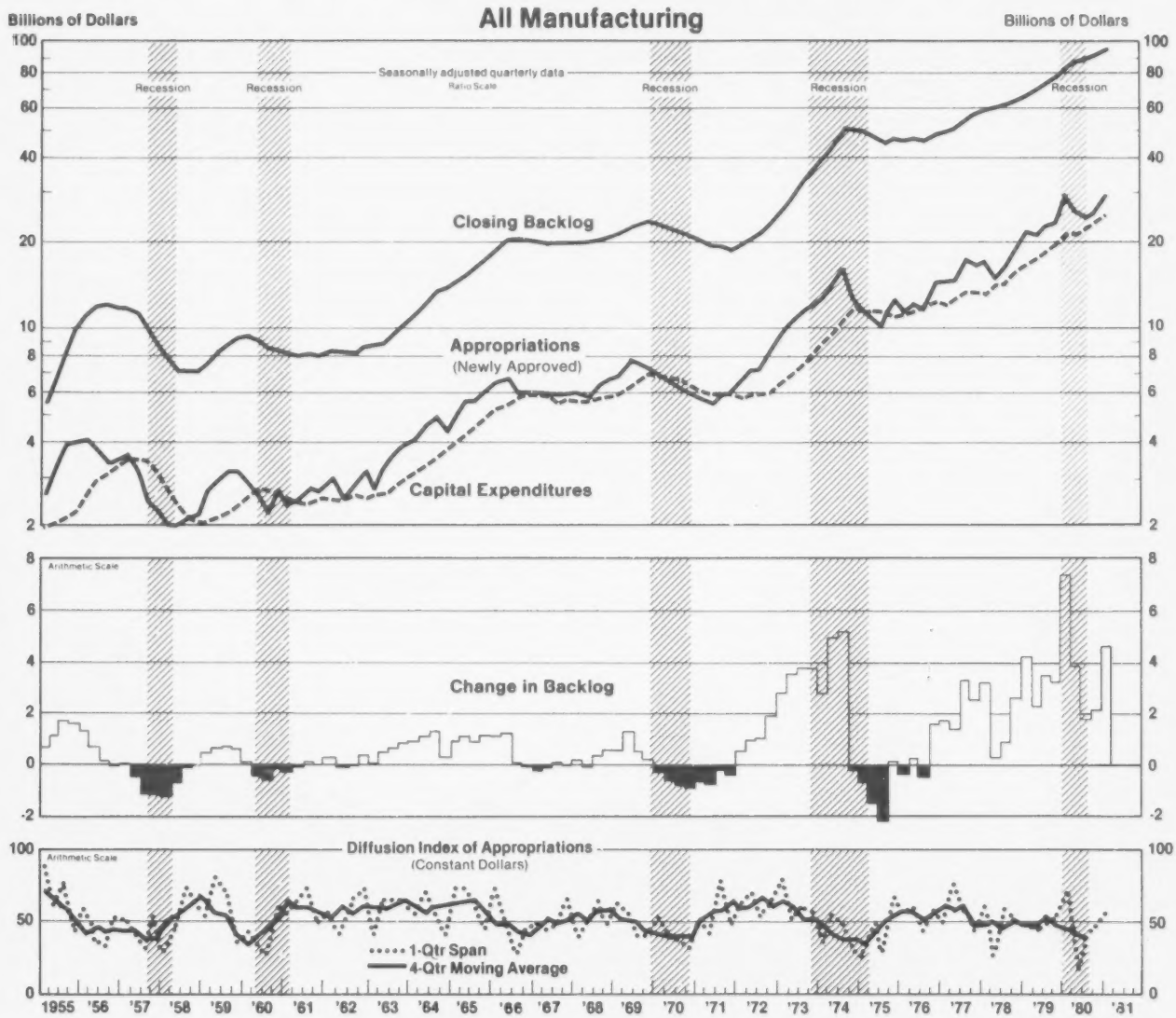
THE CONFERENCE BOARD

CAPITAL APPROPRIATIONS IN RECESSION AND EXPANSION



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The Conference Board

Quarterly Survey of Capital Appropriations

First Quarter 1981

The first-quarter survey of the 1,000 largest manufacturers found great strength in the capital appropriations and expenditures of the huge petroleum industry but only modest gains in the rest of manufacturing taken together. *There was a very large rise in petroleum appropriations, establishing a new record by a wide margin, and this pushed the rise in total manufacturers' appropriations to 16%. Excluding petroleum, appropriations went up a modest 3% and were still well below their peak level. The petroleum industry also boosted first-quarter capital spending: the total for the 1,000 largest companies increased almost 8%, but excluding petroleum the rise was about 4%.*

Despite the huge first-quarter rise in petroleum appropriations, the industry's expectation is that the 1981 total will be only slightly above 1980. The rest of the large manufacturers, taken together, expect a 6% appropriations rise in 1981, which is modest in absolute terms but rather strong for a post-recession year in which the economic outlook is uncertain. Capital spending is expected to increase a substantial 23% in 1981, with considerable support from a working-down of the backlog of unspent appropriations.

First Quarter of 1981

Total appropriations of the 1,000 largest manufacturers rose 15.8% from the fourth quarter to the first, to a level of $29.9 billion (seasonally adjusted). The petroleum industry gain was 40.4% to a record $12.2 billion—far above the previous record of $9.1 billion set in Q2-1980. *Excluding petroleum, appropriations rose 3.3% to a level of $17.7 billion.* The non-petroleum total declined 31% in the second and third quarters of 1980 and has since risen only 15%; in the first quarter of 1981, it was still one-fifth below the peak reached a year earlier. Industries recording appropriations increases of 25% or more in the first quarter of 1981 were nonferrous metals, nonelectrical machinery, steel, transport equipment other than motor vehicles, stone-clay-glass, rubber, and "other" nondurables, heavily weighted by tobacco; however, only the first two reached new highs. Notably weak showings were recorded in the motor vehicle, fabricated metals, and textile industries, all of which had recorded big increases in the previous quarter.

Cancellations and adjustments of appropriations amounted to $553 million in the first quarter. *Net appropriations were consequently $29.3 billion, up 16.9% from the fourth quarter. Excluding petroleum, net appropriations rose 1.9% to $17.4 billion.*

The 1,000 largest manufacturers' capital spending increased 7.7% in the first quarter. Outlays rose 18.5% in the petroleum industry and 3.8% in all other industries combined. That 3.8% was faster than the pace in the preceding three quarters, but well under the pace in the two years from early 1978 to early 1980.

With net appropriations once again exceeding outlays, the backlog of unspent appropriations increased $4.6 billion in the first quarter. This rise was centered in the petroluem industry, where the backlog increased $4.7 billion (17%). Some other industries also had significant backlog increases—steel (7%), nonferrrous metals (14%), and nonelectrical machinery (9%)—but the non-petroleum backlog recorded an overall net decline of $0.1 billion.

Prospects for 1981

In 1980, petroleum appropriations were up 68% from 1979 while appropriations in the rest of manufacturing combined were up only 4%. The only industry other than petroleum to record a really big increase in 1980 was nonferrous metals (74%). Although the 4% figure in 1980 was modest in absolute terms, it was in fact rather good for a recession year, especially since there had been very large gains throughout manufacturing in 1979. *In 1981, according to the survey respondents' expectations, petroleum appropriations will be essentially unchanged from 1980, appropriations in the rest of manufacturing will rise 6%, and the 1,000-company total will be up 5% (Table 4).* The 1981 expectations for appropriations have changed very little since the previous survey.

The expectation of virtually no change in petroleum appropriations is not surprising, in view of the enormous increases in 1979 and 1980 and the sharp 1980 rise in the ratio of backlog to spending (Table B, below). Given the huge first-quarter petroleum appropriations, the expectations imply a much reduced rate of appropriations in the rest of 1981. The chemical industry, which is also large (12% of total appropriations in 1980), expects a big increase in 1981, but expectations in other industries are modest. Table A compares appropriations behavior in 1980 and 1981 with the post-recession years 1975 and 1971.

Table A. Percent Change in Appropriations

	Total	Petroleum	Excluding Petroleum	Durables	Nondurables ex Petroleum
1971	—9	—10	—8	—10	—5
1975	—16	9	—24	—35	—7
1980	18	68	4	2	7
1981	5	2	6	0	16

Table B. Percent Change in the Backlog, and Backlog-Spending Ratio

	Total	Petroleum	Excluding Petroleum	Durables	Nondurables ex Petroleum
			Percent Change in Backlog, December to December		
1971	—9	—8	—10	—12	—5
1975	—7	11	—13	—20	0
1980	20	67	7	6	9
1981	1	14	—4	—13	11
			December Backlog/Annual Spending		
1978	1.09	1.01	1.11	1.18	1.01
1979	1.05	.95	1.08	1.11	1.03
1980	1.04	1.20	.99	1.01	.95
1981	.86	1.03	.79	.72	.91

Spending expectations for 1981 are very strong. The large manufacturers' total capital spending is expected to be up 23%, with a 33% rise in petroleum and 20% in the other manufacturing industries combined. These gains slightly exceed those of last year and greatly exceed the all-company expectations tabulated by the Commerce Department in February (12% total, 10% excluding petroleum). Moreover, the latest 1,000-company expectations show a net upward revision from the previous Conference Board survey (durables and petroleum revised up, other nondurables in the aggregate revised down). These expectations imply that the total backlog of unspent appropriations will rise only about $1 billion (1%) in 1981, and that backlog-spending ratios will decline (Table B).

Lora S. Collins

TABLE 1. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES
Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	II-80 to III-80	III-80 to IV-80	IV-80 to I-81	I-80 to I-81	II-80 to III-80	III-80 to IV-80	IV-80 to I-81	I-80 to I-81
				—APPROPRIATIONS—				
ALL MANUFACTURING	— 6.1	6.3	15.8	1.3	— 7.2	4.2	10.0	— 7.5
ALL MFG. EX PETROLEUM	— 7.8	11.1	3.3	—21.0	—10.0	10.5	1.8	—25.7
DURABLE GOODS	— 2.5	17.0	2.3	—22.7	— 4.3	17.2	0.5	—27.3
Primary iron & steel	73.8	12.1	26.8	7.3	68.1	13.8	25.8	1.4
Primary nonferrous metals	—20.8	—45.9	208.2	4.8	—22.7	—46.5	208.9	— 0.7
Electrical machinery & equipment	—18.8	— 3.7	— 6.6	—27.3	—21.2	— 3.9	— 6.9	—31.1
Nonelectrical machinery	—10.2	44.6	37.6	3.3	—10.9	46.8	32.3	— 4.4
Motor vehicles & equipment	1.0	52.3	—60.7	—65.0	— 1.9	53.1	—62.6	—67.8
Other transportation equipment	0.9	—27.9	76.3	—29.4	— 2.0	—27.2	76.7	—35.0
Stone, clay & glass	7.7	2.5	40.6	—32.7	6.4	— 5.0	45.5	—37.6
Fabricated metals	41.0	23.6	—40.6	— 0.9	36.9	24.5	—41.7	— 8.5
Instruments & photo equipment	48.7	—28.7	— 2.3	6.9	49.8	—29.7	— 4.1	0.3
Other durable goods†	—39.7	168.7	—61.8	—61.6	—41.0	167.1	—62.2	—61.5
NONDURABLE GOODS	— 8.2	— 0.4	25.6	24.3	— 8.8	— 3.8	17.0	12.0
Food & beverages	—37.0	25.2	—14.6	—10.8	—38.7	21.5	—14.6	—17.3
Textiles	42.9	70.0	—34.3	4.4	44.4	66.4	—35.9	— 2.8
Paper & allied products	7.5	—41.6	13.6	—65.3	5.3	—41.6	11.5	—67.6
Chemicals & allied products	—11.7	12.8	— 0.6	0.2	—15.0	11.3	— 0.1	— 6.5
Petroleum & coal products	— 3.0	— 2.1	40.4	72.0	— 2.0	— 6.4	26.1	52.7
Rubber products	1.4	—27.3	56.1	—14.3	— 0.3	—28.1	48.0	—22.0
Other nondurable goods†	— 6.4	—43.1	134.6	—17.2	—10.3	—43.8	123.9	—15.7
				—EXPENDITURES—				
ALL MANUFACTURING	5.0	2.6	7.7	16.1	3.4	1.0	3.3	6.7
ALL MFG. EX PETROLEUM	1.4	1.6	3.8	7.0	— 1.1	1.2	2.2	0.2
DURABLE GOODS	— 0.6	7.2	1.0	4.5	— 2.7	7.3	— 0.9	— 2.3
Primary iron & steel	—10.8	—13.7	6.4	—25.4	—13.7	—12.4	5.5	—29.5
Primary nonferrous metals	37.7	—10.5	14.4	54.3	34.4	—11.5	14.7	46.0
Electrical machinery & equipment	— 6.1	17.4	—10.8	10.0	— 8.8	17.1	—11.1	4.2
Nonelectrical machinery	— 5.4	28.4	3.2	25.1	— 6.2	30.3	— 0.8	15.6
Motor vehicles & equipment	3.3	4.9	3.8	1.2	0.4	5.5	— 1.2	— 7.0
Other transportation equipment	0.2	— 2.7	— 2.4	—13.0	— 2.7	— 1.8	— 2.2	—19.8
Stone, clay & glass	— 7.7	— 9.4	— 6.7	—25.1	— 8.8	—16.1	— 3.4	—30.6
Fabricated metals	— 0.8	— 8.0	—16.6	—34.6	— 3.6	— 7.3	—18.1	—39.4
Instruments & photo equipment	6.6	13.8	3.2	20.2	7.5	12.3	1.3	12.8
Other durable goods†	3.1	— 4.6	14.5	3.4	1.0	— 5.1	13.2	3.8
NONDURABLE GOODS	10.1	— 1.2	13.6	27.0	8.8	— 4.0	7.1	15.4
Food & beverages	1.7	—11.4	24.6	15.7	— 1.1	—13.9	24.6	7.2
Textiles	19.1	—14.8	7.3	9.9	20.3	—16.6	4.8	2.4
Paper & allied products	1.8	2.0	— 0.6	12.4	— 0.3	2.0	— 2.4	4.8
Chemicals & allied products	8.8	— 7.3	0.3	4.1	4.7	— 8.5	0.8	— 2.9
Petroleum & coal products	17.0	5.2	18.5	45.3	18.3	0.5	6.4	29.1
Rubber products	— 1.0	—14.8	9.8	—15.6	— 2.6	—15.7	4.2	—22.7
Other nondurable goods†	— 5.3	— 1.3	24.4	46.6	— 9.4	— 2.4	18.7	48.7

See General Notes on page 7.

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Quarterly Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	II-80	III-80	IV-80	I-81	II-80	III-80	IV-80	I-81
ALL MANUFACTURING								
Opening backlog	84,086	87,940	89,721	91,868	78,892	81,051	82,081	83,239
Newly approved	25,865	24,286	25,809	29,883	14,542	13,500	14,068	15,469
Canceled	712	133	716	553	401	77	393	286
Capital expenditure	21,299	22,372	22,946	24,717	11,982	12,392	12,516	12,931
Closing backlog	87,940	89,721	91,868	96,481	81,051	82,081	83,239	85,491
DURABLE GOODS								
Opening backlog	42,524	41,814	41,095	41,461	39,578	39,173	38,779	38,987
Newly approved	9,548	9,306	10,887	11,141	5,351	5,119	6,001	6,029
Canceled	241	71	—152	115	133	40	—83	63
Capital expenditure	10,017	9,954	10,673	10,777	5,623	5,474	5,874	5,820
Closing backlog	41,814	41,095	41,461	41,710	39,173	38,779	38,987	39,134
Primary iron & steel								
Opening backlog	4,378	3,858	3,786	3,855	5,685	5,386	5,346	5,385
Newly approved	423	735	824	1,045	243	409	465	585
Canceled	4	—31	32	—11	2	—17	18	—6
Capital expenditure	939	838	723	769	540	466	408	431
Closing backlog	3,858	3,786	3,855	4,142	5,386	5,346	5,385	5,546
Primary nonferrous metals								
Opening backlog	3,629	3,951	3,950	3,740	3,694	3,873	3,873	3,759
Newly approved	971	769	416	1,282	541	419	224	692
Canceled	119	40	—27	—5	66	22	—15	—3
Capital expenditure	530	730	653	747	296	397	352	403
Closing backlog	3,951	3,950	3,740	4,280	3,873	3,873	3,759	4,050
Electrical machinery & equipment								
Opening backlog	4,026	4,263	4,235	4,007	4,165	4,298	4,283	4,158
Newly approved	1,815	1,473	1,419	1,325	1,022	806	774	721
Canceled	6	25	—86	21	3	14	—47	11
Capital expenditure	1,572	1,476	1,733	1,546	886	808	946	841
Closing backlog	4,263	4,235	4,007	3,765	4,298	4,283	4,158	4,027
Nonelectrical machinery								
Opening backlog	7,802	7,346	7,042	6,663	6,627	6,372	6,204	5,991
Newly approved	1,928	1,731	2,503	3,445	1,075	957	1,405	1,859
Canceled	34	—188	28	—78	19	—104	16	—42
Capital expenditure	2,350	2,223	2,854	2,945	1,310	1,229	1,603	1,589
Closing backlog	7,346	7,042	6,663	7,241	6,372	6,204	5,991	6,303
Motor vehicles & equipment								
Opening backlog	10,979	11,011	10,780	11,520	8,647	8,665	8,539	8,946
Newly approved	1,337	1,350	2,056	808	753	739	1,131	423
Canceled	—10	222	—110	—22	—6	121	—60	—12
Capital expenditure	1,315	1,359	1,426	1,480	741	744	784	775
Closing backlog	11,011	10,780	11,520	10,870	8,665	8,539	8,946	8,606
Other transportation equipment								
Opening backlog	3,503	3,316	3,248	2,903	2,812	2,711	2,676	2,494
Newly approved	857	865	624	1,100	461	452	329	581
Canceled	70	—43	19	67	38	—22	10	35
Capital expenditure	974	976	950	927	524	510	501	490
Closing backlog	3,316	3,248	2,903	3,009	2,711	2,676	2,494	2,550
Stone, clay & glass								
Opening backlog	2,557	2,308	2,077	1,951	2,528	2,383	2,250	2,183
Newly approved	366	394	404	568	213	227	215	313
Canceled	7	64	22	58	4	37	12	32
Capital expenditure	608	561	508	474	354	323	271	261
Closing backlog	2,308	2,077	1,951	1,987	2,383	2,250	2,183	2,203
Fabricated metals								
Opening backlog	1,489	1,462	1,508	1,721	1,558	1,543	1,568	1,685
Newly approved	310	437	540	321	174	238	297	173
Canceled	—53	4	—29	33	—30	2	—16	18
Capital expenditure	390	387	356	297	219	211	196	160
Closing backlog	1,462	1,508	1,721	1,712	1,543	1,568	1,685	1,680

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	II-80	III-80	IV-80	I-81	II-80	III-80	IV-80	I-81
Instruments & photo equipment								
Opening backlog	1,434	1,408	1,773	1,702	1,378	1,363	1,570	1,531
Newly approved	705	1,048	747	730	397	595	418	401
Canceled	66	—26	11	38	37	—15	6	21
Capital expenditure	665	709	807	833	375	403	452	458
Closing backlog	1,408	1,773	1,702	1,561	1,363	1,570	1,531	1,453
Other durable goods†								
Opening backlog	2,727	2,891	2,696	3,399	2,485	2,577	2,470	2,855
Newly approved	836	504	1,354	517	471	278	743	281
Canceled	—2	4	—12	14	—1	2	—7	8
Capital expenditure	674	695	663	759	380	383	364	412
Closing backlog	2,891	2,696	3,399	3,143	2,577	2,470	2,855	2,716
NONDURABLE GOODS								
Opening backlog	41,562	46,126	48,626	50,407	39,314	41,877	43,302	44,252
Newly approved	16,317	14,980	14,922	18,742	9,191	8,381	8,067	9,439
Canceled	471	62	868	438	267	38	476	224
Capital expenditure	11,282	12,418	12,273	13,940	6,359	6,919	6,642	7,111
Closing backlog	46,126	48,626	50,407	54,771	41,877	43,302	44,252	46,357
Food & beverages								
Opening backlog	5,025	5,213	4,997	5,059	4,613	4,720	4,601	4,635
Newly approved	2,105	1,327	1,661	1,419	1,195	732	889	760
Canceled	367	—34	201	75	208	—19	108	40
Capital expenditure	1,550	1,577	1,398	1,742	880	870	749	933
Closing backlog	5,213	4,997	5,059	4,661	4,720	4,601	4,635	4,421
Textiles								
Opening backlog	751	702	670	834	803	776	758	849
Newly approved	163	233	396	260	92	132	220	141
Canceled	—3	9	14	29	—2	5	8	16
Capital expenditure	215	256	218	234	121	145	121	127
Closing backlog	702	670	834	831	776	758	849	847
Paper & allied products								
Opening backlog	4,905	4,624	4,724	3,985	4,380	4,220	4,276	3,863
Newly approved	774	832	486	552	440	464	271	302
Canceled	89	—251	222	—42	51	—140	124	—23
Capital expenditure	966	983	1,003	997	550	548	559	545
Closing backlog	4,624	4,724	3,985	3,582	4,220	4,276	3,863	3,643
Chemicals & allied products								
Opening backlog	8,939	9,377	9,194	9,804	9,053	9,298	9,199	9,523
Newly approved	3,142	2,774	3,129	3,109	1,756	1,494	1,662	1,660
Canceled	22	40	—185	122	12	22	—98	65
Capital expenditure	2,682	2,917	2,704	2,713	1,499	1,571	1,436	1,448
Closing backlog	9,377	9,194	9,804	10,078	9,298	9,199	9,523	9,669
Petroleum and coal products								
Opening backlog	17,977	22,114	24,819	26,706	17,015	19,339	20,875	21,899
Newly approved	9,133	8,861	8,674	12,174	5,132	5,031	4,708	5,935
Canceled	—10	297	625	207	—6	169	339	101
Capital expenditure	5,006	5,859	6,162	7,299	2,813	3,326	3,344	3,558
Closing backlog	22,114	24,819	26,706	31,374	19,339	20,875	21,899	24,175
Rubber products								
Opening backlog	1,011	1,007	991	952	1,097	1,095	1,086	1,064
Newly approved	213	216	157	245	124	123	89	131
Canceled	12	29	23	8	7	17	13	4
Capital expenditure	205	203	173	190	119	116	98	102
Closing backlog	1,007	991	952	999	1,095	1,086	1,064	1,090
Other nondurable goods†								
Opening backlog	2,954	3,089	3,231	3,067	2,352	2,430	2,508	2,419
Newly approved	787	737	419	983	452	405	228	511
Canceled	—6	—28	—32	39	—3	—15	—17	20
Capital expenditure	658	623	615	765	378	343	335	397
Closing backlog	3,089	3,231	3,067	3,246	2,430	2,508	2,419	2,512

See General Notes on page 7.

TABLE 3. PROPORTION OF APPROPRIATIONS FOR PLANT
Percent

	79-I	79-II	79-III	79-IV	80-I	80-II	80-III	80-IV	81-I
ALL MANUFACTURING	21	24	21	21	23	21	23	19	21
DURABLE GOODS	20	24	19	17	19	22	23	15	20
Primary iron and steel	13	9	13	15	8	12	18	6	5
Primary nonferrous metals	25	22	22	24	25	24	26	24	19
Electrical machinery & equipment	18	19	20	16	22	20	24	19	16
Nonelectrical machinery	20	29	19	8	15	24	20	8	19
Motor vehicles & equipment	30	17	21	10	25	20	24	16	30
Other transportation equipment	27	44	20	34	22	38	41	32	27
Stone, clay & glass	14	12	10	12	7	7	5	28	11
Fabricated metals	11	14	13	18	16	21	25	16	19
Instruments & photo equipment	11	10	23	24	13	20	10	9	12
Other durable goods	62	64	21	19	45	20	21	17	17
NONDURABLE GOODS	24	24	23	25	28	18	22	24	24
Food & beverages	25	26	26	29	19	17	21	26	22
Textiles	16	25	26	17	15	21	10	12	17
Paper & allied products	12	15	12	12	13	16	17	11	14
Chemicals & allied products	24	34	28	26	23	23	30	29	23
Rubber products	13	11	18	10	12	8	8	6	22
Other nondurable goods	39	19	20	39	68	12	22	20	33

Based on data from those companies that report appropriations for plant and equipment separately. The composition of this group varies slightly from quarter to quarter. Petroleum industry is excluded. Historical data from 1959 available on request.

See also General Notes on page 7.

TABLE 4. PERCENT CHANGE IN CAPITAL APPROPRIATIONS AND EXPENDITURES: 1979 AND 1980 ACTUAL, 1981 EXPECTED*

	Appropriations			Expenditures		
	1979	1980	1981	1979	1980	1981
All Manufacturing	32	18	5	25	21	23
All Manufacturing except Petroleum	33	4	6	28	17	20
Durable goods	31	2	0	33	17	21
Nondurable goods	33	34	8	19	24	24
Petroleum	29	68	2	16	32	33
Other	36	7	16	20	19	17

*Based on survey respondents' own expectations.

See also General Notes on page 7.

TABLE 5. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS
In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1977	1978	1979	1980	1977	1978	1979	1980
				—APPROPRIATIONS—				
ALL MANUFACTURING	63,420	67,156	88,519	104,631	43,659	43,149	52,503	
ALL MFG. EX. PETROLEUM	45,893	52,014	68,993	71,756	31,819	33,549	41,325	
DURABLE GOODS	26,644	33,089	43,339	44,271	18,512	21,316	26,035	
Primary iron & steel	2,516	3,083	3,559	2,889	1,741	1,993	2,166	
Primary nonferrous metals	1,979	1,381	1,941	3,384	1,356	883	1,161	
Electrical machinery & equipment	3,189	4,421	5,859	6,544	2,209	2,849	3,528	
Nonelectrical machinery	5,105	6,306	10,236	9,368	3,558	4,091	6,170	
Motor vehicles & equipment	5,268	6,981	8,129	7,110	3,684	4,542	4,887	
Other transportation equipment	1,864	2,911	3,817	4,201	1,294	1,860	2,250	
Stone, clay & glass	1,943	2,311	2,367	2,043	1,354	1,497	1,442	
Fabricated metals	1,104	1,625	1,846	1,571	768	1,055	1,120	
Instruments & photo equipment	1,448	2,162	2,925	3,114	1,000	1,350	1,760	
Other durable goods†	2,228	1,908	2,660	4,047	1,548	1,195	1,551	
NONDURABLE GOODS	36,776	34,067	45,180	60,360	25,146	21,833	26,468	
Food & beverages	4,966	4,898	6,640	6,603	3,438	3,167	3,940	
Textiles	838	853	960	999	582	554	574	
Paper & allied products	2,648	2,795	3,979	3,576	1,829	1,798	2,429	
Chemicals & allied products	7,854	7,759	10,725	12,170	5,417	5,017	6,352	
Petroleum & coal products	17,527	15,142	19,526	32,875	11,839	9,600	11,178	
Rubber products	862	1,035	1,057	902	600	677	643	
Other nondurable goods†	2,081	1,585	2,293	3,235	1,441	1,021	1,352	
				—EXPENDITURES—				
ALL MANUFACTURING	52,498	58,356	73,126	88,209	36,158	37,439	43,318	
ALL MFG. EX. PETROLEUM	33,148	43,861	56,250	65,981	26,444	28,263	33,646	
DURABLE GOODS	22,120	26,414	35,230	41,056	15,363	16,999	21,130	
Primary iron & steel	3,048	2,671	3,243	3,458	2,113	1,730	1,966	
Primary nonferrous metals	1,416	1,433	1,685	2,411	978	914	1,004	
Electrical machinery & equipment	3,064	3,668	4,918	6,271	2,117	2,359	2,957	
Nonelectrical machinery	4,747	5,445	8,400	9,826	3,312	3,533	5,048	
Motor vehicles & equipment	3,321	4,508	5,335	5,555	2,310	2,942	3,206	
Other transportation equipment	1,361	2,051	2,908	4,039	947	1,312	1,712	
Stone, clay & glass	1,275	1,944	2,407	2,289	888	1,258	1,465	
Fabricated metals	935	1,237	1,614	1,568	651	804	979	
Instruments & photo equipment	1,213	1,517	2,389	2,889	837	945	1,441	
Other durable goods†	1,740	1,940	2,331	2,750	1,210	1,202	1,351	
NONDURABLE GOODS	30,378	31,942	37,896	47,153	20,795	20,440	22,188	
Food & beverages	3,882	4,217	5,037	6,014	2,685	2,727	2,989	
Textiles	775	837	763	900	538	542	457	
Paper & allied products	1,825	2,140	3,018	3,859	1,271	1,376	1,833	
Chemicals & allied products	7,545	7,797	9,309	10,918	5,198	5,031	5,511	
Petroleum & coal products	14,350	14,495	16,876	22,228	9,714	9,176	9,673	
Rubber products	752	909	963	801	522	595	586	
Other nondurable goods†	1,249	1,547	1,930	2,433	865	993	1,140	

1980 constant-dollar data will be published in September.

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1980-IV are revised; data for 1980-I are preliminary. 1980 totals are revised. All 1980-IV and 1981-I figures are based on reclassification of 28 companies into industries more representative of their principal product output. Figures for these quarters based on the previous industry classifications are available on request.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets. These companies accounted for 77% of all manufacturing corporations' assets in 1973.

Historical data from 1953 available on request from the Business Conditions Analysis Department: (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

The Conference Board

Quarterly Survey of Capital Investment and Supply Conditions in Manufacturing

April 1981

The April Survey of Capital Investment and Supply Conditions among the 1,000 largest manufacturers found excess capacity continuing in the high range of the past nine months. Plans for capital expansion overall were unchanged from January, but increased in certain durable goods industries while declining in petroleum. Reports of external shortages and product allocations both continued to decline.

Overall, the percentage of respondents with some excess capacity has stayed above 30% (weighted by assets) ever since last July, though it is below the 38%-42% range of 1975-76 (Table 1). But there were a few indications of increasing pressure on manufacturing capacity in three durables industries where more companies reported "inadequate" facilities in April than in January (steel, nonelectrical machinery, fabricated metals). In the steel industry, there was also a lower incidence of "more than adequate" facilities, down from 84% in January to 59% in April. In the aggregate, 27% of respondents to the April survey had at least 10% of their capacity unused, and 14% had at least 20% of their capacity unused.

Both durables and nondurables industries on the whole remain less expansion-oriented in their investment plans than they were in 1979-80 (Table 2). The petroleum industry fall-off in plans for expansion of capital facilities was matched by a rise in expansion programs by five durable goods industries: steel, nonferrous metals, motor vehicles, fabricated metals, and instruments. But the leaders in planning for expansion, in April as in January, were chemicals (91% of firms weighted by assets) and nonautomotive transportation equipment (90%).

As in January, fewer products were reported on allocation to customers than in most of 1978-80. However, the April survey found another increase in allocation of pipe for oil and gas wells and transmission, as well as newly reported allocation of nylon staple, certain water-compatible polymers and rubber additive products, and tool and cutter grinding machines. External shortages were much reduced in April except for some processed goods needed by the machinery and motor vehicle industries (Table 3).

Expected resort to external funds in the second half of 1981 was estimated in April as 17.2% of total capital spending, revised down from January's 18.2% (Table 4). Anticipations of external sources for first half 1981, first reported in July 1980 as 18.0%, were revised for the third time this April, down to 15.7%. (The survey high for external sources was 20.2% during second half 1970.)

M. Nichols

TABLE 1. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981
					Inadequate					
All Manufacturing	19.2	21.3	20.4	16.1	14.2	13.7	12.4	12.4	10.5	10.5
Durable goods	30.7	29.8	25.0	17.0	16.4	17.9	15.9	16.7	13.9	16.1
Nondurable goods	8.3	13.4	15.6	15.0	12.1	9.7	9.0	8.6	7.2	6.1
					Sufficient					
All Manufacturing	67.6	65.9	68.4	64.0	69.1	64.6	56.3	57.0	55.0	56.6
Durable goods	61.8	64.0	63.4	59.8	60.8	53.8	46.2	44.0	45.4	49.7
Nondurable goods	73.1	67.7	73.7	68.9	77.0	74.9	66.3	68.4	64.4	62.0
					More Than Adequate					
All Manufacturing	13.2	12.8	11.1	19.9	16.7	21.7	31.2	30.6	34.5	32.9
Durable goods	7.5	6.2	11.5	23.2	22.8	28.3	37.8	39.3	40.7	34.2
Nondurable goods	18.6	18.9	10.7	16.1	10.9	15.4	24.7	22.9	28.4	31.9

TABLE 2. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981
					Expansion					
All Manufacturing	78.0	76.2	79.2	78.4	75.7	75.6	77.3	77.4	71.4	71.1
Durable goods	78.9	79.1	78.1	77.4	75.9	76.0	73.3	74.0	60.8	66.4
Nondurable goods	77.1	73.2	80.3	79.5	75.6	75.3	81.3	80.4	81.9	74.7
					No Change					
All Manufacturing	21.3	21.4	16.9	21.3	21.5	23.2	21.6	22.0	28.2	27.2
Durable goods	21.1	16.6	14.4	22.4	19.8	23.6	25.0	25.9	38.9	31.0
Nondurable goods	21.5	26.5	19.4	19.9	23.2	22.9	18.3	18.6	17.5	24.2
					Reduction					
All Manufacturing	0.7	2.3	3.9	0.3	2.7	1.2	1.1	0.5	0.4	1.7
Durable goods	0.1	4.3	7.5	0.2	4.3	0.4	1.7	0.1	0.3	2.6
Nondurable goods	1.4	0.3	0.3	0.6	1.2	1.9	0.4	0.9	0.5	1.1

TABLE 3. EXTERNAL SUPPLY SHORTAGES

Percent of Companies (weighted by assets) Reporting Lowered Production Because of Shortages

	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981
					Raw Materials					
All Manufacturing	3.1	11.1	11.1	7.0	9.7	4.5	3.7	2.3	2.6	0.4
Durable goods	0.2	0.7	1.4	0.4	0.9	0.2	0.6	0.3	0.7	0.3
Nondurable goods	5.9	20.9	21.2	14.8	18.3	8.7	6.7	4.0	4.6	0.5
					Processed Goods					
All Manufacturing	0.5	0.2	0.3	1.4	1.3	1.5	0.2	0.5	0.1	0.2
Durable goods	1.1	0.4	0.6	2.4	1.7	2.9	0.3	1.0	0.2	0.5
Nondurable goods	0.0	0.0	0.0	0.2	1.0	0.1	0.0	0.0	0.0	0.0
					Both					
All Manufacturing	0.7	2.8	5.4	3.1	3.0	4.2	1.5	1.6	1.2	0.7
Durable goods	0.2	0.2	0.4	0.1	1.8	1.2	1.8	2.0	1.2	1.7
Nondurable goods	1.2	5.2	10.8	6.6	4.2	7.1	1.2	1.2	1.1	0.0

TABLE 4. ANTICIPATED SOURCES OF FUNDS FOR CAPITAL EXPENDITURES

Percent Distribution of Responding Companies Weighted by Assets

	1977		1978		1979		1980		1981	
	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half (r)	Second Half (r)
From Internal Sources										
All Manufacturing	88.5	88.5	85.0	88.7	89.2	88.6	83.7	83.2	84.3	82.8
Durable goods	88.1	89.1	89.8	91.1	89.7	87.9	77.8	83.7	82.4	83.1
Nondurable goods	89.0	87.9	79.1	86.0	88.6	89.5	89.2	82.8	85.7	82.6
From External Sources										
All Manufacturing	11.5	11.5	15.0	11.3	10.8	11.4	16.3	16.8	15.7	17.2
Durable goods	11.9	10.9	10.2	8.9	10.3	12.1	22.2	16.3	17.6	16.9
Nondurable goods	11.0	12.1	20.9	14.0	11.4	10.5	10.8	17.2	14.3	17.4

TABLE 5. AVAILABILITY OF EXTERNAL CAPITAL FUNDS COMPARED WITH THREE MONTHS EARLIER

Percent Distribution of Responding Companies

	Jan. 1979	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981
Easier										
All Manufacturing	3.1	4.1	4.4	2.2	4.5	1.3	26.9	6.8	5.4	6.7
Durable goods	3.5	5.2	5.5	2.1	3.0	1.0	26.6	7.4	6.3	7.6
Nondurable goods	2.7	2.8	3.3	2.2	6.0	1.6	27.1	6.0	4.4	5.8
Same										
All Manufacturing	83.5	89.2	89.6	74.2	84.0	67.3	68.9	83.5	86.5	85.1
Durable goods	82.2	88.0	88.5	75.0	85.3	68.2	69.7	81.9	84.7	84.8
Nondurable goods	84.9	90.4	90.8	73.4	82.6	66.3	68.1	85.2	88.3	85.3
Tighter										
All Manufacturing	13.4	6.8	6.0	23.7	11.5	31.4	4.3	9.7	8.1	8.2
Durable goods	14.4	6.8	6.0	22.9	11.7	30.8	3.7	10.6	8.9	7.6
Nondurable goods	12.4	6.7	6.0	24.5	11.4	32.1	4.8	8.8	7.2	8.9

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Manufacturing Investment Statistics

Capital Appropriations

Second Quarter 1981

and

Capital Investment and Supply Conditions

July 1981

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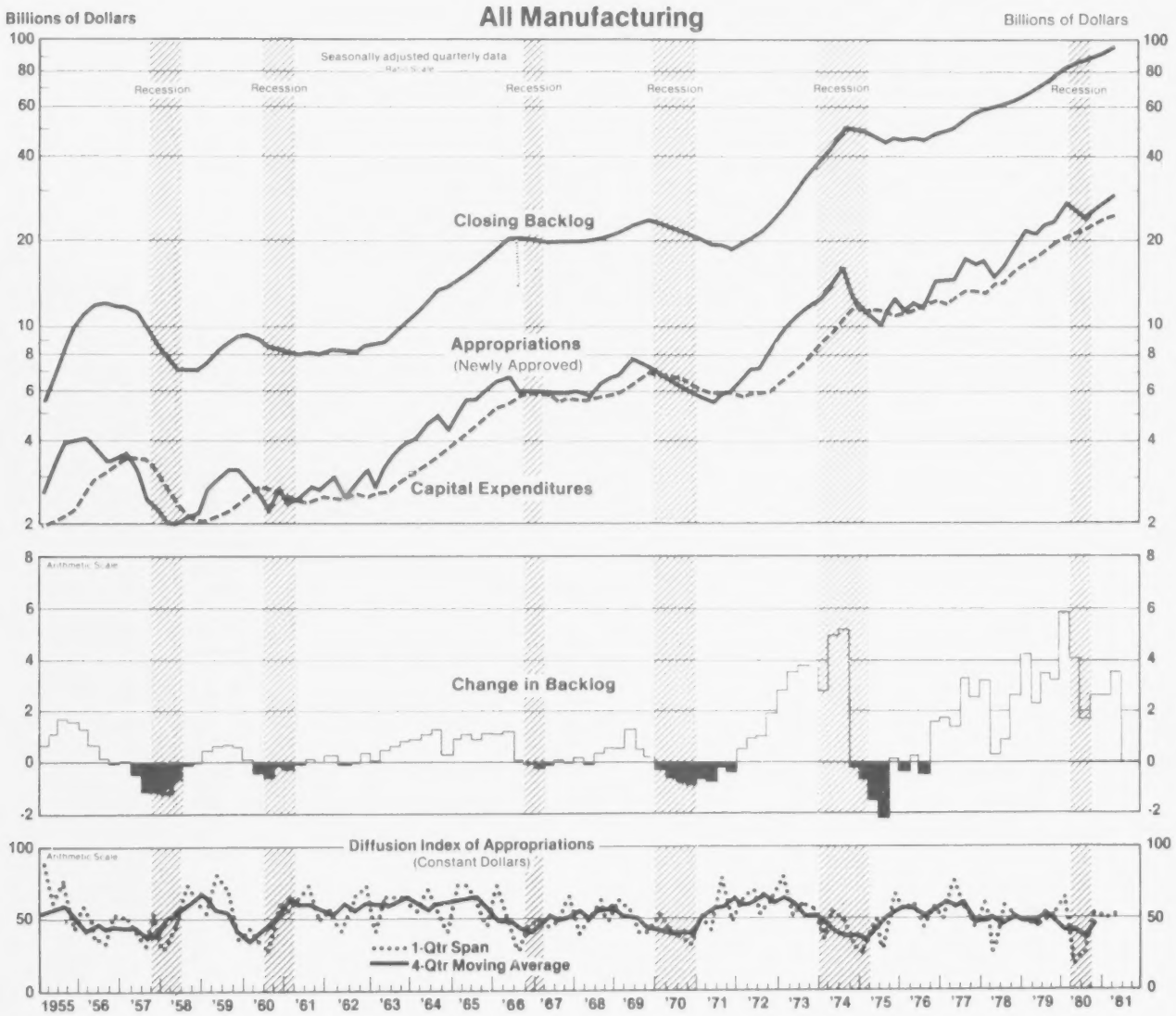

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The Conference Board

Quarterly Survey of Capital Appropriations

Second Quarter 1981

Appropriations by the petroleum industry fell sharply in the second quarter, following a big rise in the first. The decline put them back to about the year-earlier level. Appropriations by nonpetroleum companies, which had been declining on balance in recent quarters, rose very sharply in the second quarter on the strength of extraordinary gains in a few industries. Spending by petroleum companies was flat in the second quarter, following a big rise in the first. Nonpetroleum spending was up very little, continuing the sluggish pattern of recent quarters. *Total appropriations of the 1,000 largest manufacturers increased 5% in the second quarter, with a 29% drop in petroleum and a huge 31% rise for nonpetroleum industries. Total capital spending increased 2½%, with petroleum up about 1% and other industries combined up about 3%.*

Despite the big second-quarter advance, the nonpetroleum industries combined expect their 1981 appropriations to be only 9% ahead of 1980. The petroleum industry expects no change from 1980. The net result would be a mere 6% rise in total appropriations of the 1,000 largest companies. Expectations for spending are strong, however; they point to a 23% rise from 1980 to 1981, but that seems unlikely in light of the slow spending growth through the first half of 1981.

Second Quarter of 1981

Appropriations of the 1,000 largest manufacturing companies rose 4.9% to a level of $29.1 billion (seasonally adjusted) in the second quarter. Petroleum industry appropriations fell 29.4% to $8.5 billion while the nonpetroleum total rose 31.3% to $20.6 billion. Back in the first quarter of 1980, the nonpetroleum figure spurted to $20.5 billion, but otherwise it has been running in the range of $15½ to $17 billion since early 1979. In the petroleum industry, the drop in appropriations in the second quarter of 1981 wiped out the big gain in the previous quarter. Nevertheless, the total appropriations of the petroleum companies in the latest four quarters were over $38 billion, a level vastly higher than the annual figures of $15 to $20 billion registered in the late 1970's. The big second-quarter increase in nonpetroleum appropriations was centered in four industries: paper (up 450%) and instruments (up 111%), both with several large projects reported in a quarter that is usually seasonally slow; steel (up 75%), with large projects reported from a number of companies; and nonelectrical machinery and equipment (up 52%). The rest of the nonpetroleum industries were about evenly split between increases and decreases, with a very small net decline overall.

Cancellations and adjustments of appropriations were $714 million in the second quarter, a figure within the normal range. *Net appropriations, after cancellations and adjustments, were $28.4 billion, up 5.9% from the first quarter. The nonpetroleum net was up 33.4% to $20.0 billion.*

Capital expenditures of the 1,000 largest manufacturers rose only 2.5% in the second quarter, the slowest advance in a year. Total spending was $24.8 billion (seasonally adjusted). The petroleum industry spent $7.3 billion; this was only 1.3% above the first quarter but followed big gains in that quarter and in the third quarter of 1980. Nonpetroleum industries spent $17.5 billion in the second quarter, up 2.9% from the first quarter and only 8.4% from a year earlier.

With net appropriations in the second quarter of $28.4 billion and outlays of $24.8 billion, the 1,000 companies' backlog of unspent appropriations increased $3.6 billion to $96.9 billion.

Data Revisions

The assets of the survey companies, which are used to estimate the industry and 1,000-company totals from the survey responses, have been updated from 1973 data to 1979 data. At the same time, 28 companies were moved into industry classifications more representative of their principal products. The seasonal adjustment factors have also been updated. Details are in the notes on page 7.

Estimated appropriations in the first quarter of 1981 have been revised down $2.1 billion from the preliminary figure of $29.9 billion. This revision reflects incorporation of data from late-reporting companies, the updating of seasonal factors, and the revision of industry asset weights.

Outlook for 1981

In 1979, appropriations increased very substantially throughout manufacturing. In 1980, there was an enormous rise in petroleum but only modest changes in other industries. *The survey respondents' expectations point to 1981 petroleum appropriations that are unchanged from the elevated 1980 figure, a 16% gain for the rest of nondurables, centered in the paper industry, and a modest 5% advance for durables. This would put the 1,000-company total up 6% in 1981 versus 18% in 1980, and the nonpetroleum total up 9% versus 4% last year.* The 1981 expectations have changed very little over the past six months. If they are to be realized, the petroleum industry will be cutting appropriations sharply in the second half of 1981 while nonpetroleum appropriations will be rising only very modestly on balance.

The respondents' 1981 spending expectations have likewise not been revised very much, but they seem less likely to be realized. To do so would require extraordinarily rapid spending growth in the second half. For instance, the expectation for nonpetroleum firms is for a full-year spending rise of 19%, which would require that spending increase at something like 16% per quarter in the second half of 1981. This is very unlikely: The average quarterly rise in the past several years has been about 4%. The petroleum industry looks for a 34% spending rise in 1981, but that should be easily achievable on the basis of the growth that has already occurred. *The 1,000 companies together expect a 23% spending rise, compared with actual gains of 21% in 1980 and 25% in 1979. However, it is not likely that the 23% will be realized.* The Spring survey by the Commerce Department pointed to a 1981 spending rise for all manufacturing companies of only 10%.

Lora S. Collins

TABLE 1. PERCENT CHANGES IN CAPITAL APPROPRIATIONS AND EXPENDITURES
Seasonally Adjusted Data in Current and Constant (1972) Dollars

	Current Dollars				Constant Dollars			
	III-80 to IV-80	IV-80 to I-81	I-81 to II-81	II-80 to II-81	III-80 to IV-80	IV-80 to I-81	I-81 to II-81	II-80 to II-81
				—APPROPRIATIONS—				
ALL MANUFACTURING	8.4	6.1	4.9	12.8	7.4	0.7	1.5	0.3
ALL MFG. EX PETROLEUM	10.4	— 8.1	31.3	21.0	9.8	— 9.4	27.4	12.3
DURABLE GOODS	14.7	—12.0	29.5	24.5	14.9	—13.7	24.4	15.3
Primary iron & steel	11.6	21.9	74.5	246.2	13.3	20.3	66.7	220.1
Primary nonferrous metals	—31.3	68.1	—12.8	—16.0	—32.0	67.7	—15.7	—21.7
Electrical machinery & equipment	— 7.1	—11.7	11.1	—20.2	— 7.4	—12.2	5.5	—27.0
Nonelectrical machinery	47.5	3.3	51.7	104.3	49.7	— 0.9	44.4	87.8
Motor vehicles & equipment	21.5	—58.6	14.1	—43.0	22.1	—60.6	10.3	—48.9
Other transportation equipment	—20.7	44.9	—21.8	—17.9	—20.0	45.0	—23.7	—21.6
Stone, clay & glass	3.4	14.5	18.0	42.6	— 4.2	18.5	14.8	31.5
Fabricated metals	6.6	—18.9	—27.7	—15.9	7.5	—19.9	—29.2	—20.5
Instruments & photo equipment	—26.5	4.8	110.6	122.0	—27.5	3.2	101.1	107.4
Other durable goods†	185.5	—70.0	— 6.5	—55.9	183.9	—70.4	—10.3	—59.3
NONDURABLE GOODS	4.4	18.7	— 7.8	5.6	2.7	10.8	—11.2	— 8.8
Food & beverages	10.7	— 0.3	0.1	—24.0	7.5	0.0	— 3.2	—30.4
Textiles	38.3	—16.9	18.9	92.2	35.4	—18.8	12.9	76.2
Paper & allied products	—26.3	—20.4	449.5	216.6	—26.4	—22.0	446.9	202.4
Chemicals & allied products	17.3	— 8.1	— 5.6	—13.5	15.7	— 7.5	— 6.8	—18.3
Petroleum & coal products	4.8	32.7	—29.4	— 3.1	3.1	19.8	—35.6	—22.9
Rubber products	—11.3	13.8	— 1.0	— 3.8	—12.3	8.0	— 3.7	—13.8
Other nondurable goods†	—35.6	71.8	21.4	27.5	—36.3	63.8	14.5	8.5
				—EXPENDITURES—				
ALL MANUFACTURING	3.0	6.1	2.5	17.0	2.2	1.8	— 2.5	3.6
ALL MFG. EX PETROLEUM	2.3	1.8	2.9	8.4	1.7	0.2	— 0.5	0.1
DURABLE GOODS	6.5	— 1.9	3.6	7.5	6.5	— 3.9	— 0.6	— 0.9
Primary iron & steel	—15.1	3.9	6.4	—14.2	—13.8	2.5	1.6	—20.5
Primary nonferrous metals	— 9.3	0.5	15.4	38.7	—10.2	0.2	11.6	29.2
Electrical machinery & equipment	15.2	—11.9	0.1	— 1.9	14.9	—12.3	— 4.9	—10.2
Nonelectrical machinery	24.7	0.8	6.1	28.5	26.6	— 3.3	1.0	18.2
Motor vehicles & equipment	5.6	2.1	1.1	9.2	6.1	— 2.9	— 2.2	— 2.0
Other transportation equipment	— 0.4	— 8.5	5.8	— 9.1	0.4	— 8.4	3.1	—13.1
Stone, clay & glass	—11.2	— 7.7	2.6	—20.4	—17.8	— 4.5	— 0.2	—26.6
Fabricated metals	— 6.8	1.0	—17.3	—21.4	— 6.1	— 0.3	—19.0	—25.8
Instruments & photo equipment	12.2	0.7	9.0	32.0	10.7	— 0.8	4.1	23.2
Other durable goods†	1.1	3.9	— 3.5	3.2	0.5	2.6	— 7.3	— 4.9
NONDURABLE GOODS	0.2	12.9	1.6	25.3	— 1.3	6.8	— 3.9	7.6
Food & beverages	— 6.5	16.5	13.6	24.7	— 9.2	16.9	9.9	14.2
Textiles	— 5.1	2.9	3.2	12.3	— 7.1	0.5	— 2.0	2.3
Paper & allied products	5.2	— 3.4	7.4	10.3	5.2	— 5.4	6.9	5.3
Chemicals & allied products	— 6.3	5.2	— 5.7	0.4	— 7.6	5.9	— 6.8	— 5.1
Petroleum & coal products	5.1	17.7	1.3	44.5	3.5	6.3	— 7.6	14.9
Rubber products	—10.6	1.1	14.0	— 0.5	—11.6	— 4.0	10.8	—10.9
Other nondurable goods†	— 0.7	24.9	— 6.1	13.7	— 1.8	19.0	—11.5	— 3.2

See General Notes on page 7.

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES

Seasonally Adjusted Quarterly Data in Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	III-80	IV-80	I-81	II-81	III-80	IV-80	I-81	II-81
ALL MANUFACTURING								
Opening backlog	86,380	88,121	90,727	93,339	80,189	81,145	82,546	83,726
Newly approved	24,124	26,151	27,746	29,101	13,243	14,225	14,318	14,532
Canceled	250	744	946	714	137	406	494	366
Capital expenditure	22,133	22,801	24,188	24,783	12,151	12,417	12,643	12,331
Closing backlog	88,121	90,727	93,339	96,943	81,145	82,546	83,726	85,562
DURABLE GOODS								
Opening backlog	41,049	40,477	40,782	39,922	38,720	38,405	38,579	38,128
Newly approved	9,353	10,724	9,439	12,219	5,145	5,909	5,102	6,345
Canceled	86	—58	24	330	48	—31	13	173
Capital expenditure	9,839	10,477	10,275	10,647	5,412	5,766	5,541	5,509
Closing backlog	40,477	40,782	39,922	41,164	38,405	38,579	38,128	38,791
Primary iron & steel								
Opening backlog	3,902	3,786	3,795	4,050	5,411	5,347	5,352	5,494
Newly approved	707	789	962	1,679	393	445	536	893
Canceled	—30	56	—45	209	—17	32	—25	111
Capital expenditure	853	724	752	800	474	409	419	426
Closing backlog	3,786	3,795	4,050	4,720	5,347	5,352	5,494	5,850
Primary nonferrous metals								
Opening backlog	3,723	3,732	3,636	3,879	3,743	3,748	3,696	3,827
Newly approved	770	529	889	775	419	285	478	403
Canceled	49	—21	—3	—7	27	—11	—2	—4
Capital expenditure	712	646	649	749	388	348	349	389
Closing backlog	3,732	3,636	3,879	3,912	3,748	3,696	3,827	3,844
Electrical machinery & equipment								
Opening backlog	4,191	4,221	4,000	3,708	4,257	4,273	4,153	3,994
Newly approved	1,543	1,433	1,265	1,406	844	782	687	725
Canceled	14	—73	35	—26	8	—40	19	—13
Capital expenditure	1,499	1,727	1,522	1,524	820	942	826	786
Closing backlog	4,221	4,000	3,708	3,616	4,273	4,153	3,994	3,947
Nonelectrical machinery								
Opening backlog	6,967	6,666	6,462	6,444	6,145	5,978	5,864	5,854
Newly approved	1,700	2,507	2,590	3,930	940	1,408	1,395	2,015
Canceled	—149	30	—95	169	—82	17	—51	87
Capital expenditure	2,150	2,681	2,703	2,867	1,189	1,505	1,456	1,470
Closing backlog	6,666	6,462	6,444	7,338	5,978	5,864	5,854	6,313
Motor vehicles & equipment								
Opening backlog	11,066	11,017	11,485	10,780	8,696	8,669	8,927	8,558
Newly approved	1,482	1,800	746	851	811	990	390	430
Canceled	182	—92	—3	—16	100	—51	—2	—8
Capital expenditure	1,349	1,424	1,454	1,470	738	783	760	743
Closing backlog	11,017	11,485	10,780	10,177	8,669	8,927	8,558	8,253
Other transportation equipment								
Opening backlog	3,146	3,065	2,771	2,806	2,608	2,566	2,411	2,430
Newly approved	803	637	923	722	419	336	487	371
Canceled	—30	21	55	—11	—16	11	29	—6
Capital expenditure	914	910	833	881	477	479	439	453
Closing backlog	3,065	2,771	2,806	2,658	2,566	2,411	2,430	2,354
Stone, clay & glass								
Opening backlog	2,240	2,020	1,912	1,863	2,342	2,215	2,158	2,131
Newly approved	407	421	482	569	234	224	266	305
Canceled	57	23	64	34	33	12	35	18
Capital expenditure	570	506	467	479	328	270	257	257
Closing backlog	2,020	1,912	1,863	1,919	2,215	2,158	2,131	2,161
Fabricated metals								
Opening backlog	1,514	1,569	1,713	1,704	1,573	1,603	1,683	1,678
Newly approved	467	498	404	292	255	274	219	155
Canceled	1	—29	26	—54	1	—16	14	—29
Capital expenditure	411	383	387	320	224	211	210	170
Closing backlog	1,569	1,713	1,704	1,730	1,603	1,683	1,678	1,692

TABLE 2. CAPITAL APPROPRIATIONS AND EXPENDITURES (continued)

	Current Dollars				Constant (1972) Dollars			
	III-80	IV-80	I-81	II-81	III-80	IV-80	I-81	II-81
Instruments & photo equipment								
Opening backlog	1,479	1,763	1,673	1,591	1,405	1,566	1,515	1,470
Newly approved	990	728	763	1,607	562	408	421	846
Canceled	—14	10	31	11	—8	6	17	6
Capital expenditure	720	808	814	887	409	453	449	467
Closing backlog	1,763	1,673	1,591	2,300	1,566	1,515	1,470	1,844
Other durable goods†								
Opening backlog	2,821	2,638	3,335	3,097	2,539	2,439	2,821	2,692
Newly approved	484	1,382	415	388	267	758	225	202
Canceled	6	17	—41	21	3	9	—22	11
Capital expenditure	661	668	694	670	365	366	376	348
Closing backlog	2,638	3,335	3,097	2,794	2,439	2,821	2,692	2,535
NONDURABLE GOODS								
Opening backlog	45,331	47,644	49,945	53,417	41,469	42,740	43,966	45,599
Newly approved	14,771	15,427	18,307	16,882	8,098	8,316	9,216	8,187
Canceled	164	802	922	384	89	437	482	193
Capital expenditure	12,294	12,324	13,913	14,136	6,739	6,652	7,101	6,822
Closing backlog	47,644	49,945	53,417	55,779	42,740	43,966	45,599	46,771
Food & beverages								
Opening backlog	5,271	5,126	5,039	4,836	4,754	4,674	4,627	4,518
Newly approved	1,422	1,574	1,569	1,570	784	843	843	816
Canceled	19	213	85	57	10	114	46	30
Capital expenditure	1,548	1,448	1,687	1,916	854	775	906	996
Closing backlog	5,126	5,039	4,836	4,433	4,674	4,627	4,518	4,309
Textiles								
Opening backlog	718	707	806	826	785	779	834	845
Newly approved	253	350	291	346	144	195	158	178
Canceled	11	11	24	—2	6	6	13	—1
Capital expenditure	253	240	247	255	144	133	134	131
Closing backlog	707	806	826	919	779	834	845	892
Paper & allied products								
Opening backlog	4,446	4,453	3,818	3,336	4,114	4,118	3,764	3,501
Newly approved	786	579	461	2,533	438	323	252	1,376
Canceled	—193	191	—45	—43	—108	106	—25	—23
Capital expenditure	972	1,023	988	1,061	542	570	539	576
Closing backlog	4,453	3,818	3,336	4,851	4,118	3,764	3,501	4,324
Chemicals & allied products								
Opening backlog	9,362	9,173	9,819	9,417	9,288	9,186	9,529	9,315
Newly approved	2,723	3,193	2,935	2,770	1,466	1,696	1,568	1,462
Canceled	14	—167	481	245	8	—89	257	129
Capital expenditure	2,898	2,714	2,856	2,693	1,560	1,442	1,526	1,422
Closing backlog	9,173	9,819	9,417	9,249	9,186	9,529	9,315	9,226
Petroleum and coal products								
Opening backlog	21,647	24,173	26,562	31,167	19,112	20,498	21,788	24,032
Newly approved	8,683	9,099	12,070	8,518	4,764	4,912	5,883	3,788
Canceled	311	563	227	85	171	304	111	38
Capital expenditure	5,846	6,147	7,238	7,333	3,208	3,318	3,528	3,261
Closing backlog	24,173	26,562	31,167	32,267	20,498	21,788	24,032	24,521
Rubber products								
Opening backlog	994	971	956	868	1,088	1,075	1,066	1,019
Newly approved	204	181	206	204	116	102	110	106
Canceled	29	19	115	3	17	11	62	2
Capital expenditure	198	177	179	204	113	100	96	106
Closing backlog	971	956	868	865	1,075	1,066	1,019	1,018
Other nondurable goods†								
Opening backlog	2,893	3,041	2,945	2,967	2,329	2,410	2,358	2,369
Newly approved	700	451	775	941	385	245	402	460
Canceled	—27	—28	35	39	—15	—15	18	19
Capital expenditure	579	575	718	674	319	313	372	330
Closing backlog	3,041	2,945	2,967	3,195	2,410	2,358	2,369	2,481

See General Notes on page 7.

TABLE 3. PROPORTION OF APPROPRIATIONS FOR PLANT

Percent

	79-II	79-III	79-IV	80-I	80-II	80-III	80-IV	81-I	81-II
ALL MANUFACTURING	24	21	21	23	21	23	19	21	20
DURABLE GOODS	24	19	17	19	22	23	15	19	22
Primary iron and steel	9	13	15	8	12	18	6	6	11
Primary nonferrous metals	22	22	24	25	24	26	24	20	20
Electrical machinery & equipment	19	20	16	22	20	24	19	16	23
Nonelectrical machinery	29	19	8	15	24	20	8	19	25
Motor vehicles & equipment	17	21	10	25	20	24	16	30	30
Other transportation equipment	44	20	34	22	38	41	32	27	24
Stone, clay & glass	12	10	12	7	7	5	28	10	8
Fabricated metals	14	13	18	16	21	25	16	16	11
Instruments & photo equipment	10	23	24	13	20	10	9	10	15
Other durable goods	64	21	19	45	20	21	17	17	20
NONDURABLE GOODS	24	23	25	28	18	22	24	23	17
Food & beverages	26	26	29	19	17	21	26	20	20
Textiles	25	26	17	15	21	10	12	16	23
Paper & allied products	15	12	12	13	16	17	11	14	3
Chemicals & allied products	34	28	26	23	23	30	29	22	14
Rubber products	11	18	10	12	8	8	6	21	19
Other nondurable goods	19	20	39	68	12	22	20	33	42

Based on data from those companies that report appropriations for plant and equipment separately. The composition of this group varies slightly from quarter to quarter. Petroleum industry is excluded. Historical data from 1959 available on request.

See also General Notes on page 7.

TABLE 4. PERCENT CHANGE IN CAPITAL APPROPRIATIONS AND EXPENDITURES: 1979 AND 1980 ACTUAL, 1981 EXPECTED*

	Appropriations			Expenditures		
	1979	1980	1981	1979	1980	1981
All Manufacturing	32	18	6	25	21	23
All Manufacturing except Petroleum	33	4	9	28	17	19
Durable goods	31	2	5	33	17	18
Nondurable goods	33	34	7	19	24	26
Petroleum	29	68	0	16	32	34
Other	36	7	16	20	19	19

*Based on survey respondents' own expectations.

See also General Notes on page 7.

TABLE 5. CAPITAL APPROPRIATIONS AND EXPENDITURES, ANNUAL TOTALS
In Millions of Current and Constant (1972) Dollars

	Current Dollars				Constant (1972) Dollars			
	1977	1978	1979	1980	1977	1978	1979	1980
				—APPROPRIATIONS—				
ALL MANUFACTURING	63,420	67,156	88,519	104,631	43,697	43,085	52,469	58,285
ALL MFG. EX. PETROLEUM	45,893	52,014	68,993	71,756	31,845	33,509	41,380	40,075
DURABLE GOODS	26,644	33,089	43,339	44,271	18,529	21,290	26,088	24,805
Primary iron & steel	2,516	3,083	3,559	2,889	1,742	1,991	2,175	1,655
Primary nonferrous metals	1,979	1,381	1,941	3,384	1,359	880	1,163	1,879
Electrical machinery & equipment	3,189	4,421	5,859	6,544	2,210	2,845	3,535	3,655
Nonelectrical machinery	5,105	6,306	10,236	9,368	3,563	4,089	6,183	5,301
Motor vehicles & equipment	5,268	6,981	8,129	7,110	3,686	4,542	4,897	3,972
Other transportation equipment	1,864	2,911	3,817	4,201	1,295	1,858	2,246	2,292
Stone, clay & glass	1,943	2,311	2,367	2,043	1,356	1,495	1,449	1,174
Fabricated metals	1,104	1,625	1,846	1,571	768	1,055	1,125	877
Instruments & photo equipment	1,448	2,162	2,925	3,114	1,001	1,344	1,765	1,773
Other durable goods†	2,228	1,908	2,660	4,047	1,549	1,189	1,549	2,228
NONDURABLE GOODS	36,776	34,067	45,180	60,360	25,168	21,795	26,381	33,480
Food & beverages	4,966	4,898	6,640	6,603	3,441	3,165	3,938	3,691
Textiles	838	853	960	999	581	553	574	566
Paper & allied products	2,648	2,795	3,979	3,576	1,830	1,795	2,440	2,042
Chemicals & allied products	7,854	7,759	10,725	12,170	5,421	5,012	6,346	6,699
Petroleum & coal products	17,527	15,142	19,526	32,875	11,852	9,576	11,089	18,210
Rubber products	862	1,035	1,057	902	600	676	645	520
Other nondurable goods†	2,081	1,585	2,293	3,235	1,443	1,018	1,350	1,753
				—EXPENDITURES—				
ALL MANUFACTURING	52,498	58,356	73,126	88,209	36,189	37,374	43,290	49,135
ALL MFG. EX. PETROLEUM	33,148	43,861	56,250	65,981	26,466	28,224	33,694	36,822
DURABLE GOODS	22,120	26,414	35,230	41,056	15,379	16,973	21,173	22,972
Primary iron & steel	3,048	2,671	3,243	3,458	2,116	1,729	1,973	1,983
Primary nonferrous metals	1,416	1,433	1,685	2,411	978	911	1,005	1,328
Electrical machinery & equipment	3,064	3,668	4,918	6,271	2,120	2,356	2,965	3,491
Nonelectrical machinery	4,747	5,445	8,400	9,826	3,316	3,529	5,060	5,540
Motor vehicles & equipment	3,321	4,508	5,335	5,555	2,312	2,943	3,213	3,097
Other transportation equipment	1,361	2,051	2,908	4,039	948	1,309	1,710	2,182
Stone, clay & glass	1,275	1,944	2,407	2,289	889	1,256	1,472	1,311
Fabricated metals	935	1,237	1,614	1,568	652	804	982	879
Instruments & photo equipment	1,213	1,517	2,389	2,889	839	941	1,445	1,644
Other durable goods†	1,740	1,940	2,331	2,750	1,211	1,195	1,346	1,516
NONDURABLE GOODS	30,378	31,942	37,896	47,153	20,809	20,401	22,117	26,163
Food & beverages	3,882	4,217	5,037	6,014	2,687	2,725	2,989	3,357
Textiles	775	837	763	900	539	541	459	510
Paper & allied products	1,825	2,140	3,018	3,859	1,270	1,374	1,841	2,187
Chemicals & allied products	7,545	7,797	9,309	10,918	5,202	5,024	5,506	6,003
Petroleum & coal products	14,350	14,495	16,876	22,228	9,722	9,150	9,595	12,313
Rubber products	752	909	963	801	522	595	588	462
Other nondurable goods†	1,249	1,547	1,930	2,433	867	993	1,139	1,330

Each annual figure is the sum of not-seasonally-adjusted quarterly figures, and may not equal the sum of seasonally adjusted quarterly figures.

GENERAL NOTES

Data for 1981-I are revised; data for 1981-II are preliminary. 1976-79 constant-dollar annual totals are revised. Assets of the survey companies were updated from 1973 to 1979. Beginning with 1981-I, figures are based on 1979 asset ratios, and beginning with 1980-IV, on reclassification of 28 companies into industries more representative of their principal product output. Historical data are revised beginning 1977-III for six industries in which it was necessary to link the series with the new 1981 data.

As a result of the annual updating of seasonal adjustment factors, all data beginning 1980-I have been revised to incorporate new seasonal factors.

All estimates are based on a survey and are for the survey population, which is composed of the 1,000 largest manufacturing companies as ranked by total assets.

Historical data from 1953 available on request from the Business Conditions Analysis Department: (1) quarterly series seasonally adjusted; (2) quarterly series not seasonally adjusted; (3) annual series.

†Other durables includes lumber, furniture and fixtures, and miscellaneous manufactures; other nondurables includes tobacco, apparel, printing and publishing, and leather.

The Conference Board
Quarterly Survey of Capital Investment and Supply Conditions in Manufacturing

July 1981

Changes reported by the petroleum industry in July raised excess capacity among the thousand largest manufacturers to a level comparable with 1975-76. The latest Quarterly Survey of Capital Investment and Supply Conditions also found capital spending plans oriented less toward capacity expansion than at any previous period since the survey began in 1965. Respondents anticipated a slightly reduced resort to external funds for capital spending next year.

"More than adequate" capacity was reported by 40% of respondents (weighted by assets) in July, up from 33% in April (Table 1). Although nine industries had more excess capacity in July than in April, most of the aggregate rise was attributable to petroleum, where 67% of firms reported excess capacity versus 40% in April. The degree of underutilization also increased: 35% of all respondents had at least 10% of their facilities unused in July, versus 27% of all respondents in April. The July figure was heavily weighted by petroleum and motor vehicles, where 58% and 81% of July respondents were at least 10% underutilized. In motor vehicles, 73% were more than 20% underutilized.

Only 67% of the July respondents reported that their current capital investment programs will add to capacity, down from 71% in April and 77% a year earlier (Table 2). (This was the survey low, versus highs of above 90% in 1966-67.) Declines occurred in five durables industries, chemicals, and petroleum. The chemical industry, however, is still among the four in which at least 85% of firms plan for expansion; the others are nonelectrical machinery, paper, and lumber. Capital programs aimed at maintaining current capacity levels were reported by 32% of respondents, up from 27% in April.

The proportion of capital investment for which the survey respondents intend to draw on external funds sources in the second half of this year was revised downward from 17.2% to 16.1% (Table 4). Changes in the petroleum, paper, and rubber industries brought the figure down, although there were upward revisions in three durables industries. First anticipations for the first half of 1982 indicate a further reduction in use of external funds, to 15.5% of total capital spending. (The survey average, 1965-81, has been 13.8%.)

Another decline in the number of products on allocation to customers (the fewest since April 1977) reflected the recent easing of petroleum supplies as well as realignment of supply and demand for paper products and nonferrous metals, which began to be allocated nearly three years ago. Steel pipe for oil fields is now the most frequently reported item on allocation.

M. Nichols

TABLE 1. ADEQUACY OF CAPITAL FACILITIES

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981	July 1981
					Inadequate					
All Manufacturing	21.3	20.4	16.1	14.2	13.7	12.4	12.4	10.5	10.5	9.3
Durable goods	29.8	25.0	17.0	16.4	17.9	15.9	16.7	13.9	16.1	13.2
Nondurable goods	13.4	15.6	15.0	12.1	9.7	9.0	8.6	7.2	6.1	5.7
					Sufficient					
All Manufacturing	65.9	68.4	64.0	69.1	64.6	56.3	57.0	55.0	56.6	50.5
Durable goods	64.0	63.4	59.8	60.8	53.8	46.2	44.0	45.4	49.7	52.1
Nondurable goods	67.7	73.7	68.9	77.0	74.9	66.3	68.4	64.4	62.0	49.1
					More Than Adequate					
All Manufacturing	12.8	11.1	19.9	16.7	21.7	31.2	30.6	34.5	32.9	40.2
Durable goods	6.2	11.5	23.2	22.8	28.3	37.8	39.3	40.7	34.2	34.7
Nondurable goods	18.9	10.7	16.1	10.9	15.4	24.7	22.9	28.4	31.9	45.3

TABLE 2. CHANGE IN CAPITAL FACILITIES EXPECTED FROM CURRENT SPENDING PROGRAMS

Percent Distribution of Responding Companies Weighted by Assets

	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981	July 1981
					Expansion					
All Manufacturing	76.2	79.2	78.4	75.7	75.6	77.3	77.4	71.4	71.1	66.8
Durable goods	79.1	78.1	77.4	75.9	76.0	73.3	74.0	60.8	66.4	62.1
Nondurable goods	73.2	80.3	79.5	75.6	75.3	81.3	80.4	81.9	74.7	71.1
					No Change					
All Manufacturing	21.4	16.9	21.3	21.5	23.2	21.6	22.0	28.2	27.2	32.0
Durable goods	16.6	14.4	22.4	19.8	23.6	25.0	25.9	38.9	31.0	35.7
Nondurable goods	26.5	19.4	19.9	23.2	22.9	18.3	18.6	17.5	24.2	28.6
					Reduction					
All Manufacturing	2.3	3.9	0.3	2.7	1.2	1.1	0.5	0.4	1.7	1.2
Durable goods	4.3	7.5	0.2	4.3	0.4	1.7	0.1	0.3	2.6	2.2
Nondurable goods	0.3	0.3	0.6	1.2	1.9	0.4	0.9	0.5	1.1	0.2

TABLE 3. EXTERNAL SUPPLY SHORTAGES

Percent of Companies (weighted by assets) Reporting Lowered Production Because of Shortages

	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981	July 1981
					Raw Materials					
All Manufacturing	11.1	11.1	7.0	9.7	4.5	3.7	2.3	2.6	0.4	0.4
Durable goods	0.7	1.4	0.4	0.9	0.2	0.6	0.3	0.7	0.3	0.2
Nondurable goods	20.9	21.2	14.8	18.3	8.7	6.7	4.0	4.6	0.5	0.6
					Processed Goods					
All Manufacturing	0.2	0.3	1.4	1.3	1.5	0.2	0.5	0.1	0.2	0.1
Durable goods	0.4	0.6	2.4	1.7	2.9	0.3	1.0	0.2	0.5	0.3
Nondurable goods	0.0	0.0	0.2	1.0	0.1	0.0	0.0	0.0	0.0	0.0
					Both					
All Manufacturing	2.8	5.4	3.1	3.0	4.2	1.5	1.6	1.2	0.7	0.6
Durable goods	0.2	0.4	0.1	1.8	1.2	1.8	2.0	1.2	1.7	1.1
Nondurable goods	5.2	10.8	6.6	4.2	7.1	1.2	1.2	1.1	0.0	0.1

TABLE 4. ANTICIPATED SOURCES OF FUNDS FOR CAPITAL EXPENDITURES

Percent Distribution of Responding Companies Weighted by Assets

	1978		1979		1980		1981		1982
	First Half	Second Half	First Half	Second Half	First Half	Second Half	First Half	Second Half (r)	First Half (p)
From Internal Sources									
All Manufacturing	85.0	88.7	89.2	88.6	83.7	83.2	84.3	83.9	84.5
Durable goods	89.8	91.1	89.7	87.9	77.8	83.7	82.4	81.6	81.9
Nondurable goods	79.1	86.0	88.6	89.5	89.2	82.8	85.7	85.9	87.0
From External Sources									
All Manufacturing	15.0	11.3	10.8	11.4	16.3	16.8	15.7	16.1	15.5
Durable goods	10.2	8.9	10.3	12.1	22.2	16.3	17.6	18.4	18.1
Nondurable goods	20.9	14.0	11.4	10.5	10.8	17.2	14.3	14.1	13.0

TABLE 5. AVAILABILITY OF EXTERNAL CAPITAL FUNDS COMPARED WITH THREE MONTHS EARLIER

Percent Distribution of Responding Companies

	Apr. 1979	July 1979	Oct. 1979	Jan. 1980	Apr. 1980	July 1980	Oct. 1980	Jan. 1981	Apr. 1981	July 1981
Easier										
All Manufacturing	4.1	4.4	2.2	4.5	1.3	26.9	6.8	5.4	6.7	3.1
Durable goods	5.2	5.5	2.1	3.0	1.0	26.6	7.4	6.3	7.6	2.5
Nondurable goods	2.8	3.3	2.2	6.0	1.6	27.1	6.0	4.4	5.8	3.7
Same										
All Manufacturing	89.2	89.6	74.2	84.0	67.3	68.9	83.5	86.5	85.1	88.2
Durable goods	88.0	88.5	75.0	85.3	68.2	69.7	81.9	84.7	84.8	90.5
Nondurable goods	90.4	90.8	73.4	82.6	66.3	68.1	85.2	88.3	85.3	85.8
Tighter										
All Manufacturing	6.8	6.0	23.7	11.5	31.4	4.3	9.7	8.1	8.2	8.7
Durable goods	6.8	6.0	22.9	11.7	30.8	3.7	10.6	8.9	7.6	7.0
Nondurable goods	6.7	6.0	24.5	11.4	32.1	4.8	8.8	7.2	8.9	10.5

Please Note: In the interest of speeding the data contained in this publication to you, these series are now available on-line through The Conference Board Data Base. For more information, call Linette Stein at (212) 759-0900.